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ABSTRACT

This action research project devised and implemented an intervention for increasing student engagement in the learning process. The targeted population consisted of elementary students in an urban area in north central Illinois. The problem of non-engaged learning was documented by means of observation of class participation, a student attitude survey, and assessments of student academic performance. Analysis of probable cause data revealed that deficits in motivation and thinking skills contributed to non-engaged learning, as well as current teaching strategies that may not provide opportunities for student ownership. A review of solution strategies resulted in an intervention focusing on a thematic integrated unit, student assignment choices, and problem solving. Post-intervention data indicated that targeted students demonstrated marked improvements in remaining on task and following directions. Students became more aware of their responsibilities as learners and members of a group. This was evidenced by their enthusiasm for selecting their assignment choices and integrating the problem-solving model in their learning. (Five appendices include sample student survey, observational checklist, and the thematic integrated unit. Contains 34 references.) (HTH)

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Improving Elementary Student Engagement in the Learning Process Through Integrated Thematic Instruction

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ABSTRACT

This report describes an intervention for increasing student engagement in the learning process. The targeted population consists of elementary students in an urban area located in north central Illinois. The problem on non-engaged learning will be documented through observation of class participation, a student attitude survey, and assessments that indicate student academic performance.

Analysis of probable cause data revealed that deficits in motivation and thinking skills contributed to non-engaged learning. Current instructional strategies may not provide opportunities for student ownership. Research indicates there is an overemphasis on information giving and a lack of skill development in the curriculum.

A review of solution strategies suggested by experts in the field, along with an analysis of the problem setting resulted in an intervention focusing on a thematic integrated unit, student assignment choices, and problem solving.

As a result of the intervention, the targeted students demonstrated marked improvements in remaining on task and following directions. Students became more aware of their responsibilities as learner and members of a group. This was evidenced in their enthusiasm for selecting their assignment choices and integrating the problem-solving model in their learning. These improvements were observed by the researchers in the nine targeted students as well as the whole class.

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CHAPTER 1

PROBLEM STATEMENT AND CONTEXT

General Statement of the Problem

The students of the targeted elementary school demonstrate inadequate engagement in the learning process. Evidence for the existence of the problem include direct observation of class participation, a student survey of classroom climate, and assessments that indicate student academic performance.

Intermediate Problem Context

Site A

The targeted school is located in a low socio-economic section of an urban area. This area is marked by increasing violence. The school, constructed in 1993, is the first new school built in the district in over 20 years. The building of the targeted school resulted in the closing of another school in the same neighborhood. The structure is a one story, air conditioned building with common areas each surrounded by 6 classrooms. There are two courtyards that divide the school into three distinct sections. There is a row of classrooms along two sides of the building with the classrooms that surround the common areas in the center. The school rests on one city block that includes a park named for a young girl who was slain on the site prior to the building of the school.

Based on the 1995-96 School Report Card, the total school enrollment is 490 students including kindergarten through sixth grade. The racial ethnic background of the students is:

46% White, 48% Black, 5% Hispanic and 1% Asian. Of these students, 63% are eligible for free or reduced lunch. The student attendance rate is 95%, with a mobility rate of 8% and chronic truancy rate of 5%. Limited-English-Proficient students comprise 1% of the student population. The parents/guardians of 94.8% of the students made at least one contact with the students' teachers during the school year.

The entire staff at the targeted school by assignment includes: 2 full-time building administrators; a secretary; 19 classroom teachers; 6 specialists, including art, music, P.E., multicultural, French, and Spanish; a part-time nurse, a library aide; a computer aide; 4 instructional aides; 2 learning resource teachers; a cross-categorical special education teacher; a social worker; a psychologist; a home school counselor; a speech and language pathologist; a parent-community liaison; 2 Title I teachers; 4 lunch time aides; 3 food service personnel; a building engineer; and a full-time custodian. The building administrators each have a Master's Degree in administration. This is the first year in the targeted school for both administrators. The average number of years teaching for the staff is 16 years. The average number of years teaching for the specialists is 11 years. Non-certified student support positions include para-professional aides, a parent-community liaison, a secretary, a full-time custodian, and a building engineer for an average of 6 years experience. The degree levels achieved by the professional staff are 23 Master's Degrees and 10 Bachelor's Degrees. There are 15 minority personnel, who constitute 36% of the building employees.

The targeted school is a magnet school with a global studies theme, which emphasizes the major ethnic groups in the community, nationally, and internationally. The chosen class will focus on the study of European cultures. The site has no specific attendance area because enrollment is open to children in grades kindergarten - sixth across the district. Students' names are entered into a lottery system with selection being based on ethnicity. The children attending the site wear school uniforms.

The Treasury of Literature Reading series by Harcourt Brace is used for reading instruction. This anthology is used along with supplemental skill activities for 120 minutes per day. Mathematics instruction is provided by using the University of Chicago Everyday Mathematics Program for 45 minutes per day. Social science instruction is based mostly on the global studies theme selected for each grade level along with supplementation of the district curriculum for 55 minutes per day. Science instruction follows newly developed district grade level themes to be taught using integrated units for 30 minutes per day. These programs are supported by a Title I grant that allows for additional instruction.

Further enrichment to the standard program is given to the students through a global studies curriculum. The instructional media for the school is comprised of books, reference materials, computers, CD Roms and video equipment. The school library is linked with the public library system as a satellite branch. Each classroom is equipped with 4 computers in addition to the all-school computer lab.

Family and community volunteers are encouraged to participate in the learning process through several programs that invite them into the school. There is a mentoring program that pairs a community member friend with a student. During the school year several activities are planned to encourage families to come into the building and be active participants in the learning process.

Site B

The targeted school is located in an economically depressed section of an urban area. In 1972, a new school was built to replace the 1883 structure. This was the result of parent and community concerns about the condition of the original school. The 1972 school structure was attached to an existing gymnasium that was built in 1954. The structure is a two story, air conditioned, building with movable walls to accommodate changing methods of instruction. The school grounds include one city block with a limited play area for outdoor activities.

Based on information provided by the district's attendance office in July 1997, the total school enrollment is 456 students: consisting of grades first through sixth. The racial ethnic

background of the student is: 61% White, 23% Black, 8% Hispanic, 8% Asian and less than 1% Native American. Of these students, 13% are eligible for free or reduced cost lunch.

The total number of staff by category includes: a full-time administrator; one secretary; 18 teachers; 3 specialists, including art, music, and physical education; a part-time nurse; a library aide; an instructional aide; a social worker; a learning resource teacher; a psychologist; a speech and language pathologist; 4 lunch time aides; 2 food service personnel; a half-time custodian; and a building engineer. The building administrator holds a Master's Degree in special education and in administration. She has served one year as the administrator at this site. The average number of years experience of the specialists is 15 years. Non-certified student support positions include para-professional aides, a secretary, and a building engineer for an overall average of 8 years experience. The educational levels attained by the professional staff are 21 Master's Degrees and 5 Bachelor's Degrees. The average number of years teaching for the staff is 17 years.

The teaching staff devotes the following minutes per 5-day school week to the following subjects: mathematics, Grades 1-3 (primary) and Grades 4-6 (intermediate) 45 minutes; science, primary 20 minutes, intermediate 30 minutes; English, primary 150 minutes, intermediate 120 minutes; social science, primary 35 minutes, intermediate 55 minutes.

The instructional reading program is literature based. The mathematics program consists of Math Their Way and the Comprehensive School Math Program (CSMP). There is additional instruction for all students by a Special Learning Opportunities Teacher. This teacher provides additional enrichment activities on a pull out basis.

All students receive enrichment and additional skill development activities weekly in the following: art (40 minutes), music (60 minutes), library (30 minutes), physical education (60 minutes), and computer lab (60 minutes). The instructional media for the school includes an extensive collection of books, and reference materials, computers, CD Roms and video equipment. An all-school reading incentive program, built around the Accelerated Reading Program, encourages independent reading.

Parent and community volunteers are evidenced daily throughout the building. Volunteers work with children, assist teachers, and do clerical duties in the office.

Site C

The targeted school comprises grades kindergarten through sixth. Located in an open area of a quiet neighborhood within the northwest quadrant of an urban area, the school was built in 1950. Site C is a well-maintained single level school located near its business partner, a community hospital. The school grounds include a community playground, walking path and a large play area.

As recorded by to the 1995-96 School Report Card, the total school enrollment is 343 students. The ethnic background of the students is: 58.9% White, 33.8% Black, 5.2% Mexican-American, 2% Asian/Pacific Islander, and 0% Native American. The school has a mobility rate of 33.7%, a daily attendance rate of 92.8%, and 53.9% are eligible for free or reduced-priced lunches.

The philosophy of Site C encourages the development of self-esteem, community spirit, and academic excellence for each member of the school population. The school provides a foundation of knowledge for students and parents through a positive learning atmosphere with programs that develop individual potential, promote personal success, and encourage adaptability to change while creating a desire for lifelong learning. Students of the targeted school experience and learn skills of collaborative and cooperative learning.

The total number of staff by category includes: a full-time building administrator; a secretary; 14 teachers; 3 specialists, for art, music, and physical education; a part-time nurse; a library aide; a computer aide; 6 instructional aides; a learning resource teacher; a social worker; a psychologist; a home-school counselor; a speech and language pathologist; a parent-community liaison; a general curriculum implementor; a Success For All (SFA) implementor; 2 SFA Reading teacher/tutors; 2 Title I teachers; 3 lunchtime aides; 1 food service personnel; a half-time custodian; and a building engineer. The building administrator holds a Master's Degree in administration. She has served one year as the administrator at this site. The average number of

years experience for staff is 10 years. The average years of teaching experience of the specialists is 15 years. Non-certified student support positions include para-professional aides, a parent-community liaison, a secretary, and a building engineer for an average of 6 years experience. The educational levels attained by the professional staff are: 11 Master's Degrees; 10 Bachelor's Degrees; and 5 Associate's Degrees. There are currently 5 minority personnel, who comprise 12 % of the building employees.

The targeted school implements the Johns Hopkins SFA Reading Program, which is a literature based program incorporating reading and writing skill development. This program focuses on prevention and interventions as it provides 90 minutes of daily instruction to cross-grade groups at their designated reading levels. These reading levels are determined by teacher observation, Woodcock Reading Mastery Tests, Jerry Johns Reading Inventory, and 8-week assessments. Students reading below grade level in primary grades are given priority for one-to-one tutoring sessions.

Students in the targeted school utilize cooperative learning in the SFA Program and the University of Chicago Everyday Mathematics Program. The science and social science curriculums are presented through integrated thematic instruction. The Activities Integrating Mathematics and Science (AIMS) program is the primary source of materials for science. Support for these programs is provided by a Title 1 Grant that includes instruction by a teacher and para-professional aide.

The Surrounding Community

This study was conducted in the second largest urban area in the state of Illinois. The city covers a 50 mile radius that is approximately 90 miles northwest of the city of Chicago and approximately 90 miles east of the Mississippi River. Its population is 143,263. The racial-ethnic makeup of the urban area is 79% White, 15% Black, 4.2% Hispanic and 1.8% of other origins. The Rock River naturally divides the urban community into distinct east and west sections. In the past decade, the majority of business and residential growth has occurred in the

northeast quadrant of the city. This has resulted in economic disparity between the east and west sides of the city.

The community offers a wide variety of resources including: 3 hospitals, 183 public parks, 424 religious institutions, nine public libraries and a regional airport. The largest private employer in the area is a health care provider, followed by manufacturing firms in the area that produce aircraft components, machine tools, environmental controls, furniture hardware and automobile components. The targeted school district is the largest public employer with approximately 3,800 permanent employees.

The median household income for the urban area is $28,282. The population below the poverty level is 13.4%. There is an unemployment rate of 7.1%. The median sale price of a single family home is $88,300, according to the National Association of Realtors.

The urban area offers many educational choices. There are currently 26 private elementary and 12 private secondary sites. In the targeted public school district there are 41 elementary, four middle and four secondary schools, as well as two education centers.

The student population for the 1995-96 school year was 26,752, with an operating expenditure per pupil of $6,803.41. There are six institutions of higher learning with a total enrollment of 15,505. These institutions provide education in medicine, business and general curriculum. The percentage of the population who have attained a high school diploma or higher is 74.8%. A bachelor's degree or higher has been attained by 18.7% of the population.

On February 16, 1994, Senior Judge Stanley J. Roszkowski and Magistrate Judge P. Michael Mahoney of the United States District Court found the targeted district guilty of intentional discrimination against Black and Hispanic students over the previous 30 years. The order identified minorities as Black and Hispanic students. The original lawsuit was filed by a group called "People Who Care" (PWC), and was a result of the targeted district's plan to save seven million dollars by closing 11 schools. Eight of the 11 schools targeted to be closed were located on the west side of the Rock River and were heavily attended by minority students. The present order is aimed at supplying an adequate remedy for the existing effects of discrimination.

To fund the remedy, the court has ordered the targeted school district to use the money allocated to the Tort fund to the pay the cost of remediation. These Tort funds provide additional staff, instructional programming, updated educational resources, facilities and parent and community education for the benefit of the minority students and families.

Under the desegregation plan, the urban area is divided into the west zone, which is the entire city west of the Rock River; the northeast zone; and the southeast zone. The student assignment plan approved by the court is called Controlled Choice. The targeted district refers to this plan as Choice Advantage. Beginning in the fall of 1997, the student assignment plan will be phased in beginning with kindergarten, seventh and ninth grades. Parents in the west zone may choose three to five schools in any of the three zones. Parents in the northeast and southeast zones may select three to five schools in their respective zone or the west zone. Enrollment preferences will be given to children who have a sibling in a school or live near a school, and each school's enrollment will be based on racial balance. The racial balance is defined as +/-15 of the minority population, which is 34.4%. This formula must be used for academic programs as well as extra-curricular activities.

In response to parent and community concerns, several groups of citizens have joined together to monitor the implementation of the court order. The most evident group is actively involved in monitoring the implementation of educational programs for majority and minority students. Several business leaders from the community have offered their assistance and expertise in the areas of planning and finance.

National Context of the Problem

The problem of actively engaging students in the learning process is a frustration experienced by many educators (Adams, 1996). It has been noted in educational literature that students who are actively engaged will attain greater academic success. Enpowerment, personal achievement and self-direction levels rise as students take personal responsibility for their learning (Blackmore, 1996). A significant force in student engagement is the student's perception of their ability to do successful work (Kallick, 1989).

In current research, a strong consensus has been developing on the importance of students engaged in the learning process and what defines engaged learning in classrooms and schools. "This emerging consensus on learning, together with a recognition of the changing needs of the 21st century, has stimulated the development of specific indicators of engaged learning." (Jones, Valdez, Nowakowski, & Rasmussen, 1994, p. 1).

Students engaged in the learning process display four characteristics: responsibility for learning, enthusiasm for learning, strategic problem solving and collaborative problem solving. Students who take responsibility for their own learning are self-regulated. These students are able to define goals and problems that are personally meaningful. Engaged learners are energized and take pleasure in learning. The strong desire for solving problems and understanding ideas is evidenced in engaged learners who are intrinsically motivated. Strategic learners can apply and transfer knowledge in numerous ways to solve problems. These students value collaborative learning strategies by realizing the importance of working with others (Jones et al., 1994).

Instruction that promotes engaged learning must be authentic, challenging, and woven throughout the curriculum. These instructional activities are complex, require extensive time commitment and exploration of the curriculum. Exploration infers investigation of real world surroundings. "Students are encouraged to reflect upon their discoveries, which are essential for the student as a cognitive apprentice. Apprenticeship takes place when students observe and apply the thinking processes used by practitioners" (Jones et al., 1994, p. 2).

Students are able to demonstrate engaged learning when instructors provide the opportunities necessary for desired academic performance. The instructor's role is to channel activities in a direction that supports engaged learning. Students need to envision a world where they can be successful regardless of their color, economic situation, or national origin. Students must foresee the relationship between immediate academic performance and their world outside of school. As engaged learners, students can learn to apply and transfer their knowledge to future challenges (Stevenson, Lee, & Stigler, 1986).

CHAPTER 2

PROBLEM DOCUMENTATION

Problem Evidence

In order to document the extent of student engagement in the learning process a student attitude survey was administered. The survey consisted of thirteen questions regarding students' attitudes and personal responsibility toward the learning process.

Of the 42 students in the classes at Site A and Site C, 29 were participants in the survey. The 26 students at Site B did not participate in the survey because the survey was not approved by district administration. The attitude survey form was developed by the researchers (Appendix A) to aid in the recording process. A summary of the survey results is presented in table one (See page 12).

An analysis of the responses to the survey reflects a positive attitude towards learning. Students reflected a desire to display their effort and please their families. Students indicated a strong desire to share school activities with their families. The lower frequency of positive responses to questions 11 and 13 may indicate a lack of self direction in their personal accountability.

Figure 1 (see page 13) represents an overwhelming positive attitude towards coming to school and learning. Of the 29 students surveyed, 86% accepted the premise that learning was their personal responsibility. Students' responses did not strongly indicate an advocacy on their own behalf to ask questions and perform tasks without reminders. When

analyzing a compilation of maybe and no responses, the data appears to suggest that these students are outwardly directed. These students seem to seek guidance and reminders from others concerning task completion. Teacher observations suggests that students may lack insight and skills to be totally accurate about how to assess themselves. The self-report data from questions 11 and 13 appear to confirm teachers observations regarding student insight in responding to survey questions. Students may be responding based on their preconceived notions of teacher expectations.

The students at Site A exhibit behaviors that show greater concern for social power than academic progress. The students engage in verbal discourse that is demeaning to their classmates and as a result do not regularly display the indicators indentified for engaged learners. When surveyed, these same students respond positively to questions regarding their engaged behavior. Their responses displayed a sense of engagement that is not evident in their behavior.

The second grade students at Site B exhibit behaviors that indicate they are trying to meet teacher expectations of engaged learning. In verbal discourse, the children have expressed that they see the importance of self - responsibility for engaged learning. Many of the children have consistantly met the desired engaged expectations indicated on the observation checklist, while others must make continued effort. One of the targeted students has resorted to a daily assignment notebook to improve personal responsibility for his learning.

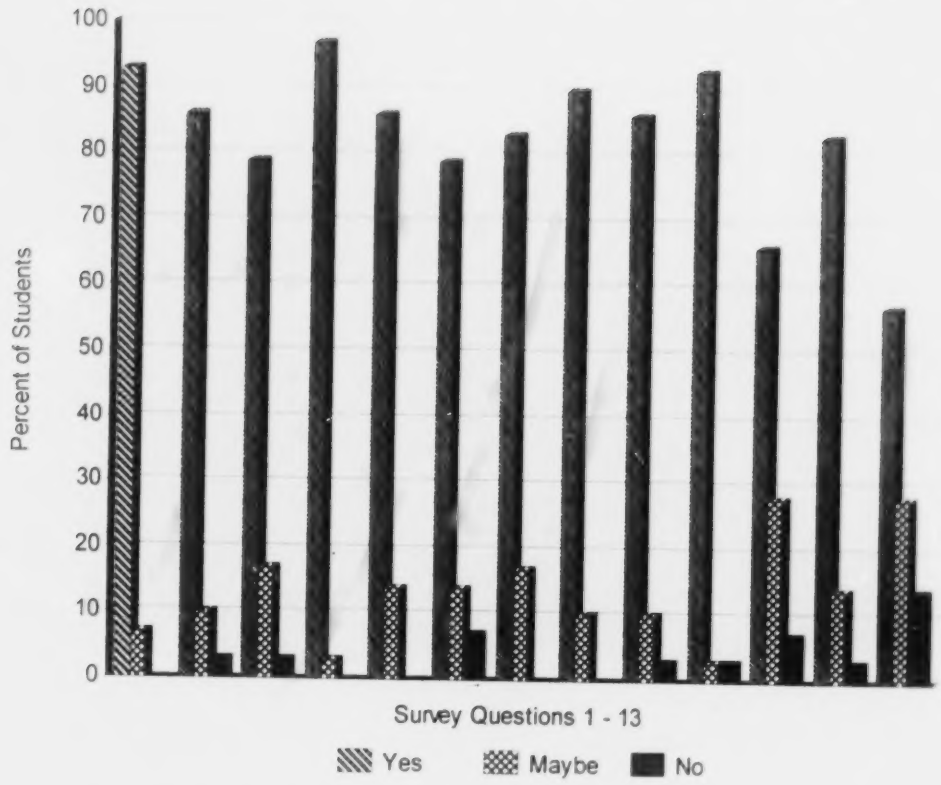
Students at Site C appear to lack the ability to honestly assess their feelings and responsibility toward school. Their responses to the student survey reflected feelings of what they thought the teacher may want to hear. The subjects of the survey consisted of timid, eager to please kindergarteners. For many this was their first exposure to school and teachers. Teacher observation suggests that students' lack of engagement is seen in their poor use of time and inablitity to complete tasks without several reminders.

Table 1

Summary of Students Attitude Survey Responses Sept. 2, 1997 Through Sept. 8, 1997

Survey Question	Yes ☺	Maybe 😐	No ☹
1. Enjoys school	27	2	0
2. My job to learn	25	3	1
3. Excited learning new things	23	5	1
4. Learning feels good	28	1	0
5. Best pleases family	25	4	0
6. Follows directions	23	4	2
7. Uses time wisely	24	5	0
8. Doing best please me	26	3	0
9. Important to share with family	25	3	1
10. Complete work on time	27	1	1
11. Ask questions	19	8	2
12. Tasks without reminders	24	4	1
13. Chores without reminders	17	8	4

N=29



N=29

Figure 1. Student Attitude Survey Figures

Student Attitude Survey Questions:

1. I enjoy coming to school to learn.
2. I feel it is my job to learn all that I can.
3. I get excited when I learn something new.
4. Learning makes me feel good about myself.
5. I do my best in school because I want to please my family.
6. I follow directions.
7. I use my time wisely.
8. I do my best in school because it pleases me.
9. It is important for me to share my school activities with my family.
10. It is important to me to complete my school work on time.
11. I ask questions about things I want to know.
12. I do my tasks in school without reminders.
13. I do my chores at home without reminders.

Probable Causes

In analyzing the context, one may note several underlying causes for students' inadequate engagement in the learning process. The following five factors have been noted to interfere significantly with student engagement: low socio-economic status, large class size, high mobility, low attendance, inadequate parent involvement and excessive curriculum.

The literature suggests several other underlying causes for students' inadequate engagement in the learning process. Such causes would include: motivational deficits, lack of personal responsibility, inability to set achievable goals, poor problem solving skills, and lack of curricular relevance.

Motivational deficits have observable and serious implications for students' academic progress (Bahr, Garner, & Okolo, 1995). Students' perception regarding their competence more accurately predicts achievement than actual ability levels. Consequently, student motivation is critically impacted (Fulk & Montgomery-Grymes, 1994). According to Schultz and Switzky (1990), teachers need to pay more attention to the power of shared responsibility and communicate with the student if they hope to promote intrinsic motivation and significant academic growth.

Many teachers complain about the problem of getting students to be responsible for their own learning. In Bacon's (1993) research, he discusses Maslow's idea that self-actualized individuals will take responsibility for themselves. In order for students to develop responsibility for their learning, teachers must work to align the student's backgrounds, attitudes and interests with methods of instruction (DeMeo, 1995). Students need to feel that tasks are valuable and attainable (Berliner & Cassanova, 1996). They are more likely to take responsibility for their learning when they know that teachers recognize them as vital decision makers in determining curriculum choices.

Another cause of students non-engagement in the learning process is their inability to set achievable goals. When people set goals and do not accomplish them, the result is a feeling of

lower self-esteem (Krupp, 1992). Teachers can assist students in the selection of reasonable short-term goals through prompts (Fulk & Montgomery-Grymes, 1994).
Researchers have learned that students are not familiar with the concept of goal setting strategies. Through class discussions teachers can instruct students to understand what strategies are most effective in goal planning (Barell, 1992).

Much has been written about the deficit in students' problem solving skills in relation to their academic progress. Building cognition of one's world is a dynamic, mind-engaging process. The constructivist viewpoint suggests that information must be mentally acted upon in order to have significance for the learner (Brooks & Brooks, 1993). There is a need for teachers to regularly monitor students' thinking and the methods that the students implement to solve different kinds of problems. This monitoring will assist teachers in understanding what their students actually know so that instruction will follow accordingly (Carpenter, Chiang, Fenneman, Loef, & Peterson, 1996).

Research suggests that "the parallel between what we teach and real life should never be a mystery" (Scheer, 1997, p.24). Learning is a productive process in which the learner is constructing an internal representation of knowledge through personal experience. This representation is constantly open to change. Learning is a tireless process in which meaning is refined on the basis of experience (Burke, 1994). Future success within real world settings may be dependent upon the acquisition of specific skills, making these relationships explicit (Fulk & Montgomery-Grymes, 1994).

In essence, the probable causes gathered from the sites encompass: socio-economic status, class size, student mobility, attendance, active parent participation and mandated curriculum. Research suggests that non-engagement of students may be related to: motivational deficits, lack of personal responsibility, inability to set achievable goals, poor problem-solving skills, and curriculum that leaves students unprepared for societal challenges.

CHAPTER 3

THE SOLUTION STRATEGY

Literature Review

Professionals in the field of education confront and analyze the difficulty of engaging students in their own learning process by stressing the importance of promoting self-regulation and motivation techniques to encourage active student engagement. Not only do professionals acknowledge the benefits of a teaching strategy that encompasses productive, self-regulated learning, but parents and students also perceive the rewards. Both theoretical and empirical literature supports the theory that when a student's perception of their personal control in a learning situation is increased, their motivation to learn increases. (Hootstein, 1996).

The increasing diversity of today's student population requires educators to utilize a variety of instructional methods to meet the needs of individual learners (Mercer, 1996). Instructional tools teachers can implement to increase a student's self-regulation of learning and motivation to learn include modeling, problem-solving strategies, student assignment choices, goal setting, and self-evaluation. Important preconditions to successful motivation using any of these tools requires, as stated by Hootstein (1996), that the teacher provide the student with genuine caring, respect, and encouragement. Also, a student becomes more personally and actively involved in the learning process through the use of strategies that appeal to their interests.

Instructional modeling provides a powerful approach for demonstrating successful completion of a task, while clearly defining the importance of individual steps necessary for its completion. As stated by Costa, (1992, p.99), "Learning to think is probably best learned through the imitation and emulation of others." The role of the teacher in this process cannot be

over emphasized. As students become more active and strategic in their thinking, their appetite for implicit instruction increases. Modeling, by its very nature, provides the explicit example while encouraging the more implicit goal of developing independent learning. By a teacher modeling self-questioning methods for the students, the responsibility then shifts to the student to answer the purposeful questions. The result of this modeling technique is an increase in the students' contribution to the lesson. For successful results, the teacher must continually assess the process (Mercer, 1996). Modeling by teachers and administrators when they are teaching, planning, and problem solving can be used to demonstrate metacognitive strategies for students (Costa, 1992).

Metacognitve processing is expressed unequivocally in the problem-solving method. A close relationship exists between effective problem solving and metacognitive abilities. For this important reason educators should support and promote increased problem-solving reflection by students (Fountain & Fusco, 1992). The acquisition of problem-solving strategies outlined by Fountian & Fusco (1992) encompasses the following consecutive steps: recognizing the problem, gathering information, generating solutions, making choices, and monitoring solutions. It may be necessary for teachers to support problem solving using explicit instructional methods. In order to help students focus on relevant information after the problem has been recognized, teachers may direct the inquiry, use prompts or questioning strategies. Further, the use of mnemonics, graphic organizers, and social discourse may be used to review and introduce new choices or solutions. These explicit and implicit teaching strategies then support and challenge the learner (Mercer, 1996). Nicholls (1983) also supports a strategy of questioning by contradicting the students' knowledge to stimulate the development of logical thought and problem solving. The use of contradictory questioning should be conducted by a teacher to acknowledge a student's prior knowledge and experiences, permitting a feeling of empowerment and connectedness to the learning.

As clearly stated by Burke (1995, p.73), "There is nothing so unequal as the equal treatment of unequals." Parents and teachers must realize the need to treat students fairly even

though fair may not be equal (Curwin & Mendler, 1988). Recognition of diversity among students dictates that teachers provide opportunities that are closely related to real-world experiences and interests of the students.

Empowering students to direct their own learning should be the goal of all instruction. Learners cannot be neatly pigeon-holed or labeled, nor can their strengths and weaknesses be simply defined. An accurate and analytical awareness by educators of students' learning needs for explicit and implicit instruction, as presented on a continuum, depends on consideration of factors such as: depth of background knowledge, basic and higher order skill development, and their interaction with the content. For example, if a student has learning difficulties and a deficit of prior knowledge, the method for teaching would require more explicit instruction (Mercer, 1996). Regardless of the assessment of a student on the continuum, studies support that students learn the most when they advance quickly in a subject, but in small steps (Brophy, 1983).

By recognizing the learning needs of a student, and providing quick but small steps to learning a specific task, teachers avoid the consequences that occur when students are consistently given tasks that are too challenging. Brophy, (1983) found that when students were placed in such circumstances, they developed motivation problems and gave up. This small, but quick, step program of learning is similar to the instructional process endorsed by Johns Hopkins University SFA Reading Consultant, Judith Ramsey, (personal communication, March 27, 1996). Ramsey supports a process of learning called scaffolding, defined by her to be a process of moving from explicit to implicit instruction as the student learns. As the students' dependency on teacher support diminishes, they progress as the directors of their own learning (Mercer, 1996).

As directors of their own learning, students are most intellectually engaged, able to define lesson content, to select relevant assignments, to pursue interesting directions, and to complete socially appropriate tasks (Perrone, 1994). To assure continued involvement in learning, students can be encouraged and focused on the use of self-regulated strategies such as: journaling, self-recording, graphing, and self-reinforcement of progress by reviewing their goals. These self-regulated strategies are valuable means to increase learner independence, as well as to promote

on-task behavior (Fulk, 1994). According to Nicholls (1983), when students are task-involved, they choose activities that maximize their chances of learning and that offer a realistic level of challenge to the students.

When providing opportunities for students to be task-involved, teaching goal setting is an important strategy that helps students identify tasks and strategies necessary for successful completion of their goal. Personal goal setting creates an ownership of the task and empowers students to control their own thinking, learning, and productive efforts. Like assessment, goal setting is a universal strategy that translates to any realm of life (Barell, 1992). Personal goal setting typically causes students to select goals above their present achievement level. Encouraging students to set flexible goals, ones that offer the possibility of adjustment as students perform, develops a more continual motivation toward task completion. In attaining learner outcomes, goal setting that emphasizes student effort is often reflected in students achievement that exceeds their academic ability (Covington, 1983). By accomplishing personal goals, students reinforce the concept of success (Brophy, 1983).

After completion of a chosen task, students need ample time and methods to assess their learning. Students must accept ownership of the rationale, goals, strategies, and assessment of that with which they are to be engaged (Burke,1995). Self-evaluation affords the student the opportunity to reflect upon their thinking processes, skills, and performance. Task- involved students are more likely to self-evaluate their failure by asking themselves, "What must I do differently to succeed?" If a student is non-engaged in their task, self-evaluation may result in the question, "Am I stupid?" (Nicholls,1983). According to Nicholls's (1983) research, self-evaluation produces greater continued interest in the learning task.

Several researchers have attempted to understand the type of self-regulation students need to remain engaged in their learning. The parameters applied in the definitions of responsibility are intrinsic and extrinsic motivation (Bacon, 1993). Intrinsic motivation is evident when students engage in an activity for the sheer pleasure it brings. An innate propensity to engage one's interests and exercise one's capacities to seek and conquer optimal challenges allows the student

personal control of their learning. (Bacon, 1993; Burke, 1995; Fulk, 1994; Wilt, 1996). Extrinsic motivation is displayed by actions or behaviors that a person engages in that are coerced or seduced by external forces (Senecal, Koestner, & Vallerand, 1995).

An extrinsically motivated student is highly influenced by adult or other external power, leaving the student with diminished control in the academic setting. Types of extrinsic rewards include: praise, smiles, congratulatory handshakes, gold stars, certificates, candy, prizes, and even money. External rewards, while sustaining productivity, decrease interest in the task, thereby diminishing the likelihood that the task will be continued in the future (Chance, 1993; Senecal et al., 1995; Wilt, 1996). "An over-reliance on rewards may be at the very heart of hindering the realization of one of society's goals for children--that they become citizens who are lifelong learners who are committed to living responsibly within their various life contexts" (Wilt, 1996, p.20).

Kaplan, as cited by Wilt (1996) sites the following examples of circumstances that are appropriate uses of extrinsic rewards from Kaplan when intrinsic motivation and interest are low; when the focus is success and competence and not the reward itself; during development or remediation of a skill. Wilt (1996) further notes Katz's research showing that productivity and interest is maintained through the use of informative feedback regarding the competence of work. Educators should avoid using rewards as incentives when possible. Rewards work best when they are pleasant surprises. Having the student perform a task and then providing an unexpected reward upon completion of the task is most effective. Chance's (1993) research states that extrinsic motivation, using the threat of punishment, may motivate students to perform, but does not teach them. Rather, it teaches them only what not to do, not what to do.

Intrinsic rewards are the most promising alternative to extrinsic rewards. Many experts on reinforcement promote the merit of intrinsic rewards. Unlike extrinsic rewards, in the form of punishment, intrinsic rewards actually teach students. When students solve a problem correctly,

they know how to solve similar problems. Intrinsic rewards do not depend on the teacher or other people for support (Chance, 1993). Motivation for learning is not forced on the student but the student assumes personal control for their actions (Wilt, 1996).

Brophy and Lee (1996) state that motivation to learn can exhibit itself as both a general trait and a situation-specific state:

> As a general trait, motivation to learn refers to an enduring disposition to value learning as a worthwhile and satisfying activity, and thus to strive for knowledge and mastery in learning situations...In specific situations, a state of motivation to learn exists when task engagement is guided by the goal or intention of acquiring the knowledge or mastering the skill that the task is designed to teach (p.304).

They further believed that most individuals who exhibit motivation to learn as a general trait are likely to do so because they find learning to be intrinsically rewarding.

While intrinsic rewards are important, they may not be effective for all students. Some students lack necessary skills to obtain intrinsic rewards due to lack of knowledge and understanding. Intrinsic rewards for academic work may be weaker than rewards attainable for other behavior. A student may feel more intrinsically motivated for the attention of one's peers following a clever remark rather than the correct answer to a problem (Chance, 1993).

As indicated by the literature, to engage students in the learning process, educators must utilize a variety of methods and tools to motivate students. Instructional strategies and a teacher's belief system influence the development of motivation in the students. Motivation that arises from within the student and is derived from self-regulated participation in activities or from the pleasure of learning best supports student engagement (Wilt, 1996). Students who choose their own task seldom choose a simple one. Students want to work on real-life problems that are complex and open ended, calling upon many diverse skills. When student choice is provided, students feel better physically and mentally, achieve more academically, develop positive attitudes, and feel respected as people (Rogers & Share, 1997).

Project Objectives and Processes

As a result of altered curricular and instructional emphasis, during the period of September 1997 to December 1997, the targeted elementary students will increase their ability to be actively engaged in the learning process, as measured by direct observation checklists, student attitude survey and assessments that indicate student academic performance.

In order to accomplish the terminal objective, the following processes are necessary:

1. A thematic integrated unit that fosters engaged learning will be developed.
2. A series of student assignment choices will be developed for the thematic integrated unit.
3. The content of the thematic unit will integrate problem solving.

Action Plan for the Intervention

The following steps will be taken to implement the intervention.

1. A thematic integrated unit that fosters engaged learning will be developed.

   A. Who
   Site A's fourth grade class consists of 28 students. Site B's second grade class consists of 26 students. Site C's kindergarten class consists of 24 students.

   B. What
   The thematic unit will be used as an instrument with 10 identifiers of engaged learning infused into the curriculum. The identifiers will be taught in the format of mini-lessons. The lessons will involve: naming, defining, modeling, practicing and reflection of the skill. These identifiers will be included in the thematic unit lessons. These lessons will be structured in the following manner: introduction, skill reinforcement, student selected problem-solving activity and assessment.

   C. When
   The targeted classes will participate in the mini-lessons for approximately 15 minutes, one time per day, for 10 consecutive days. The thematic unit will be implemented once a week for 6 weeks.

D. Why

The purpose of teaching the identifiers of engaged learning is to foster personal investment in the students' learning. Research supports modeling and distributing the teaching of ideas across several lessons for students to construct meaning and acquire understanding. Student involvement in lesson choice fosters intrinsic motivation to learn.

2. A series of student assignment choices will be developed for the thematic integrated unit.

A. Who

Instruction at Sites A, B, and C will involve student choice of the thematic unit activities. Lesson activities will be modified to accommodate the various grade levels.

B. What

Students will be provided assignment choices that foster engaged learning based on self-interest. Some examples of the assignment activities to be selected may include the following:

1. art activities (diorama, pictures, bookmarks, posters, clay, and others)
2. writing activities (poems, stories, raps, songs, letters, and others)
3. performances (skits, songs, dances, pantomime, and others)

C. When

The students will be provided activity choices that promotes engaged learning one time per week for 30 to 60 minutes for 6 sessions of the thematic unit.

D. Why

Research supports student activity choices which foster intrinsic motivation and encourages effort. Students are able to connect with prior knowledge and real world issues.

3. The content of the thematic unit will integrate problem solving.

A. Who

Students at Sites A, B, and C will be involved in thematic unit activities that promote problem solving strategies.

B. What

The student selected activities will follow the problem solving model that includes the following steps:

1. identifying the problem
2. restating the problem in the student's own language
3. gathering information
4. generating solutions
5. choosing and implementing a solution
6. reflection

These steps will be formally taught and practiced with the class before being implemented independently or in small groups.

C. When

The unit activities will take place one time per week for 15 to 60 minutes, over six sessions.

D. Why

Problem solving is a necessary life skill for real world connections.

Methods of Assessment

In order to assess the effects of the intervention, a student attitude survey, observation checklists, and assessments that indicate student academic performance will be developed. These assessments will be used to determine the level and frequency of student engagement in the learning process. In addition, on-going teacher journals will be kept throughout the intervention period.

CHAPTER 4

PROJECT RESULTS

Historical Description of the Intervention

The objective of this project was to increase student engagement in the learning process. The implementation of a thematic integrated unit that fostered engaged learning by providing student assignment choices while incorporating problem solving skills was selected to effect the desired changes.

A student attitude survey was developed to assess the extent of students' engagement in the learning process. The thirteen question survey can be found in Appendix A. The survey was administered to students at Site A and Site C whose parents had consented to their participation in the action research project. A modification was made for Site B students due to absence of administrative approval of the survey. The researcher at Site B assessed student attitudes through informal, oral questioning of students. Site C students were surveyed individually by the kindergarten aide to accommodate for their age and reading ability.

A thematic integrated unit that fostered engaged learning was developed. The thematic unit, on the topic of dreams and imagination, was employed as an intervention with 10 skills related to engaged learning infused throughout the unit. The ten skills were used to assess individual and group work. The checklists of these skills can be found in Appendix B and Appendix C. The skills taught were in the format of mini-lessons involving: naming, defining, modeling, practicing and reflecting. A sample of the mini-lessons can be found in Appendix D. The targeted classes participated in the mini-lessons for approximately 15 minutes, one time per day, for 10 days. The original plan was to complete all of the mini-lessons in ten consective

days, but scheduling conflicts necessitated additional teaching time. In order to reinforce the engaged learning skills, the thematic unit afforded students the opportunity to apply and demonstrate learning engagement.

The identifiers were infused in the thematic unit using the following structure: introduction, skill reinforcement, student selected problem-solving activities and assessments. The thematic unit encompassed six integrated lessons revolving around the theme of dreams and imagination. The thematic integrated unit can be found in Appendix E.

The content of the thematic unit integrated activities that promoted student problem solving. The problem-solving model developed by the researchers included the following steps: identifying the problem, restating the problem in the student's own language, gathering information, generating solutions, choosing and implementing a solution, and reflection. The steps were formally taught and practiced with the classes prior to being implemented independently or in small groups. At the conclusion of each lesson, students were provided assignment choices that fostered engaged learning based on self-interest. Some examples of the assignment activities included art activities, writing activities and performances. Lesson activities were modified to accommodate various grade levels and individual instruction levels. The unit activities took place for approximately 60 minutes over six sessions.

Weekly observation of three students selected from each site were recorded on observation checklists. Student selection was based on initial teacher observations of students exhibiting behaviors of disengagement in the learning process. The observation checklists were maintained one time per week for independent and group work of the identified students. In addition, researchers kept a weekly observation journal of class participation. These instruments were used to analyze the research.

Presentation and Analysis of Results

In order to assess the effects of the intervention, a weekly observation of selected students were recorded on checklists. The observation checklists were maintained for independent and group work activities. The researchers also documented in narrative form additional observations of the classes' participation and reaction to the intervention.

Observation checklist data were aggregated into the following three categories: during instruction of the 10 identifiers of engaged learning, during instruction of the thematic-integrated unit, and at the conclusion of the intervention. Researchers recorded student performance on an observation checklist (Appendix B and Appendix C) by rating student engagement on chosen identifiers. A rating scale consisting of *frequent*, *some what* and *not yet* were used when recording the quality of engagement. In order to analyze the data, numerical values were assigned to each point on the scale and then total scores were converted to percentages. A student displaying strong engagement earned two points, moderate engagement earned one point and zero points were earned for poor engagement. Data is presented in Table 2 and Table 3.

Table 2

Data Collected from Individual Observation Checklists

Percentage of Total Points Earned While Working Individually

	During Instruction of 10 Identifiers of Engaged Learning			During Instruction of Thematic Integrated Unit			At Conclusion of Interventions		
	Display Effort	Has Work Material	Independ Work	Display Effort	Has Work Material	Independ Work	Display Effort	Has Work Material	Independ Work
Site A									
1A	75	75	50	83	83	75	50	50	50
2A	100	75	75	100	100	83	100	100	88
3A	25	75	0	50	92	67	100	100	75
Site B									
1B	100	100	100	100	58	83	90	100	90
2B	100	50	50	67	92	67	80	80	70
3B	100	50	50	83	100	83	90	90	60
Site C									
1C	100	100	50	92	100	92	80	100	50
2C	25	50	50	42	75	42	80	100	80
3C	50	50	50	58	83	50	60	90	70

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Table 3

Data Collected from Group Observation Checklists

Percentage of Total Points Earned While Working in a Group

	During Instruction of 10 Identifiers of Engaged Learning			During Instruction of Thematic Integrated Unit			At Conclusion of Interventions		
	Cooperat-ion	Active Listener	Verbal Particip.	Cooperat-ion	Active Listener	Verbal Particip.	Cooperat-ion	Active Listener	Verbal Particip
Site A									
1A	75	25	75	25	17	67	50	75	75
2A	100	50	0	100	83	58	100	88	63
3A	50	25	25	33	33	50	63	50	75
Site B									
1B	100	75	100	100	100	58	100	100	60
2B	50	75	100	75	75	83	90	80	70
3B	75	100	100	100	100	75	100	90	80
Site C									
1C	100	100	100	100	92	100	60	70	100
2C	50	50	0	58	58	0	70	50	50
3C	50	50	50	33	67	33	40	50	40

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Based on Figures 2 through 19 and the anecdotal records of the researchers, six of nine observed students showed measurable gains in engaged learning while working individually. In the category of following directions, eight of the nine observed students displayed gains. Students making gains appeared to remain on task longer in individual and group activities throughout the intervention.

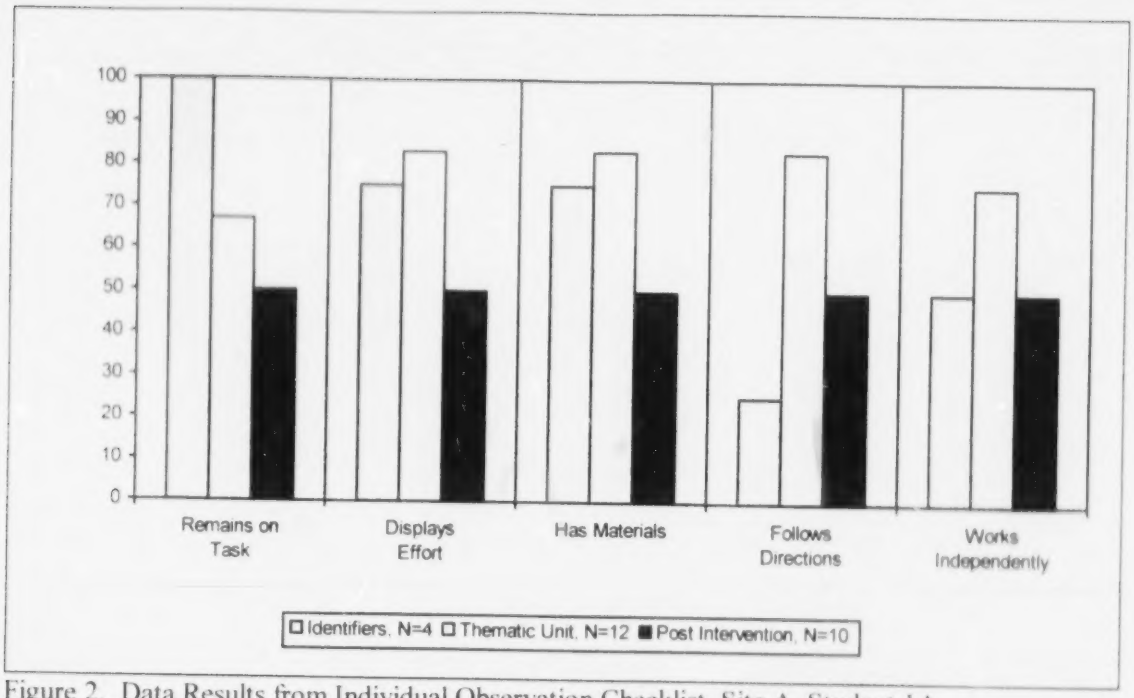


Figure 2. Data Results from Individual Observation Checklist, Site A, Student 1A

Engaged Learning Shown by Percentage of Quality Points

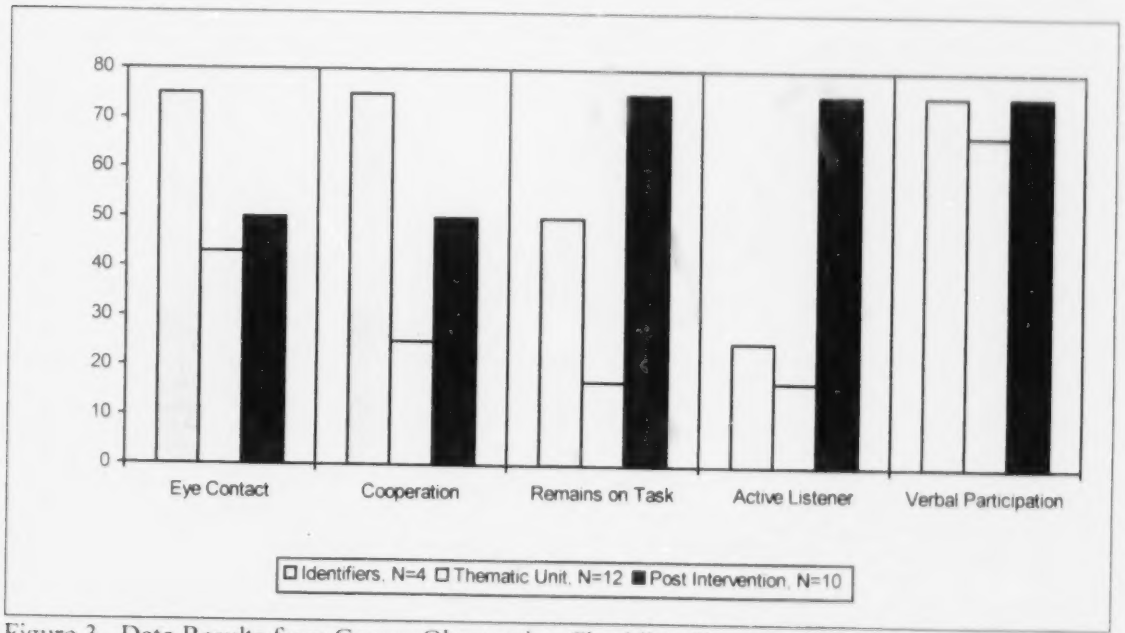


Figure 3. Data Results from Group Observation Checklist, Site A, Student 1A

Engaged Learning Shown by Percentage of Quality Points

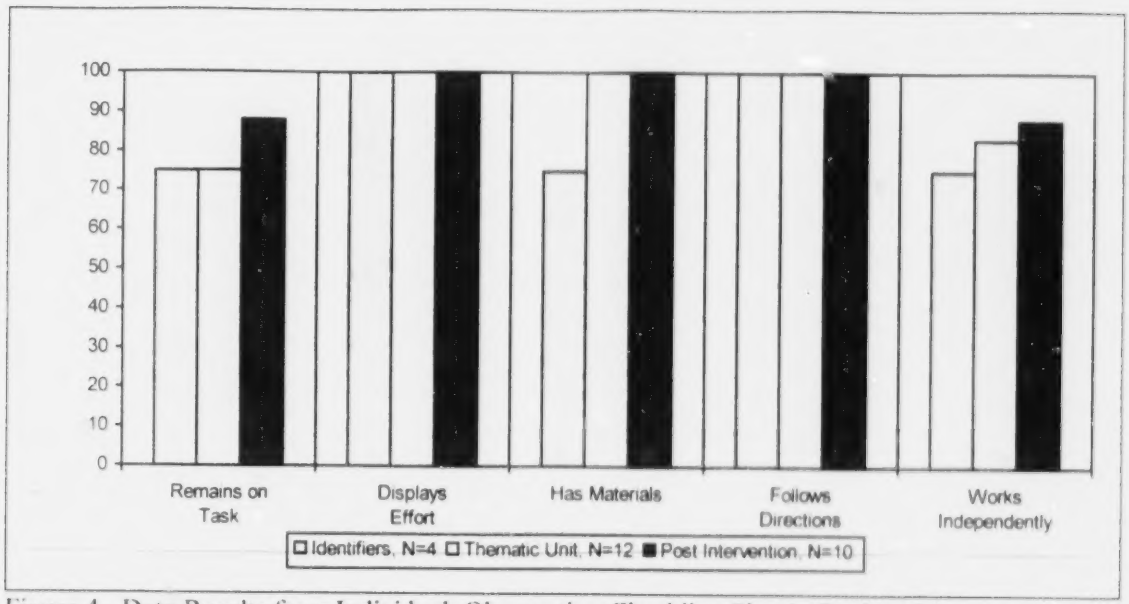


Figure 4. Data Results from Individual Observation Checklist, Site A, Student 2A

Engaged Learning Shown by Percentage of Quality Points

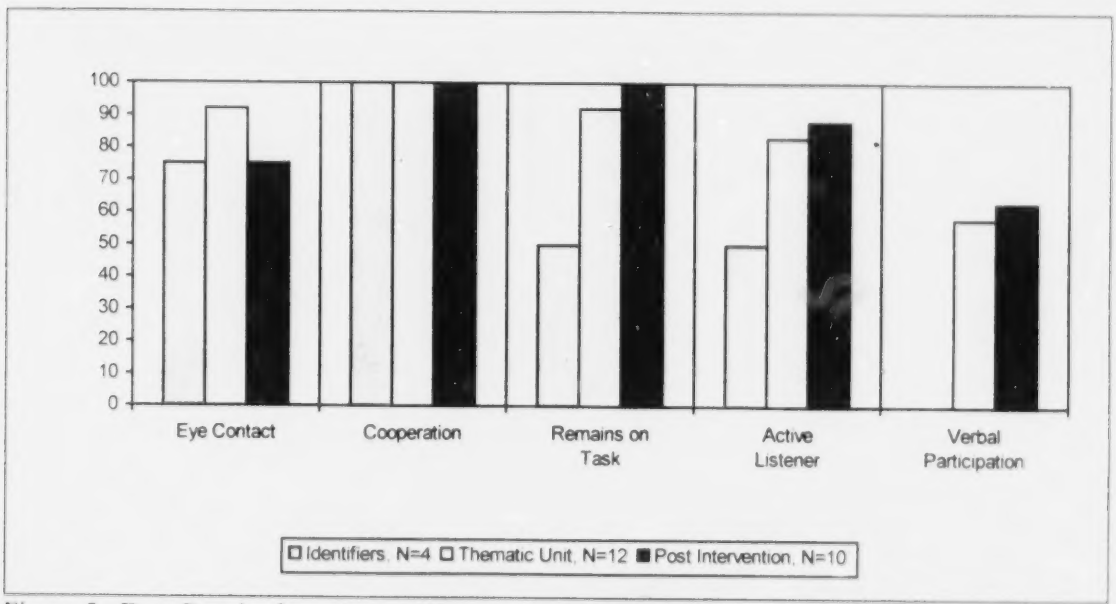


Figure 5. Data Results from Group Observation Checklist, Site A, Student 2A

Engaged Learning Shown by Percentage of Quality Points

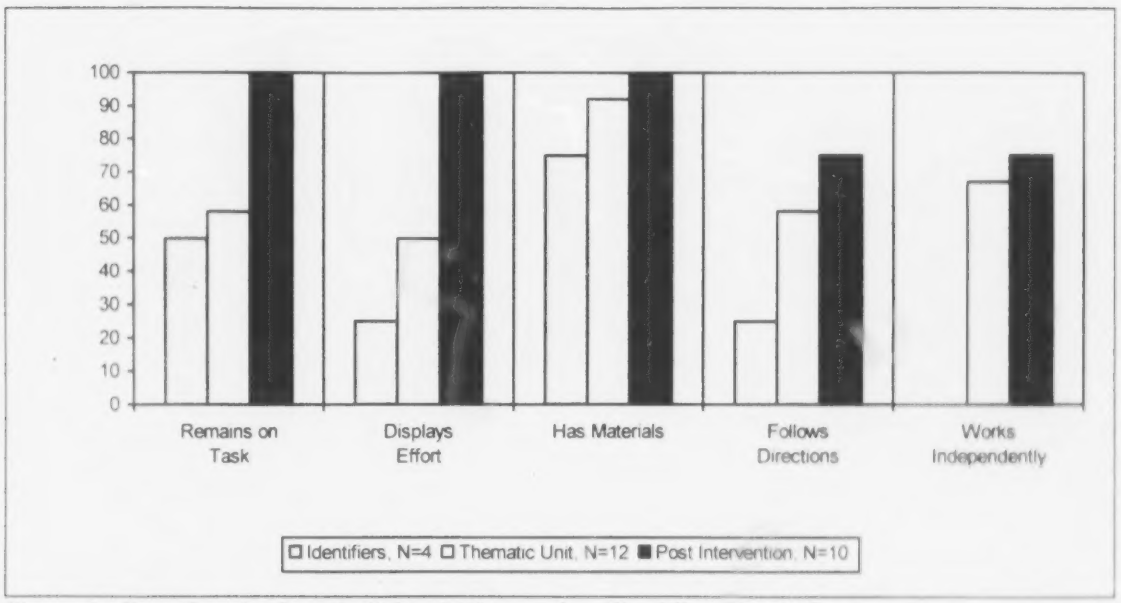


Figure 6. Data Results from Individual Observation Checklist, Site A, Student 3A

Engaged Learning Shown by Percentage of Quality Points

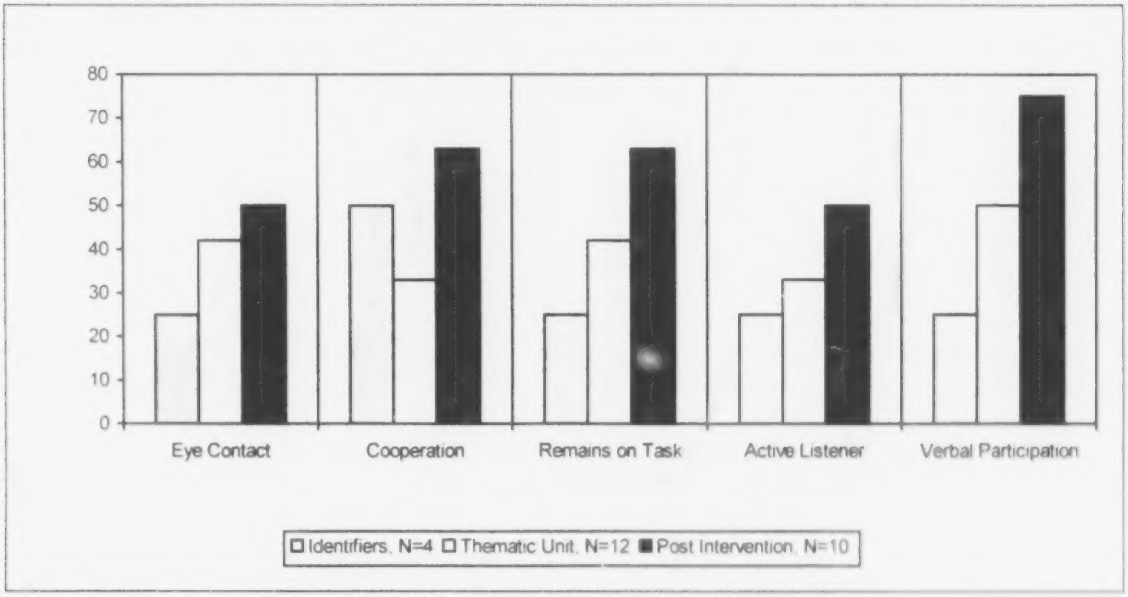


Figure 7. Data Results from Group Observation Checklist, Site A, Student 3A

Engaged Learning Shown by Percentage of Quality Points

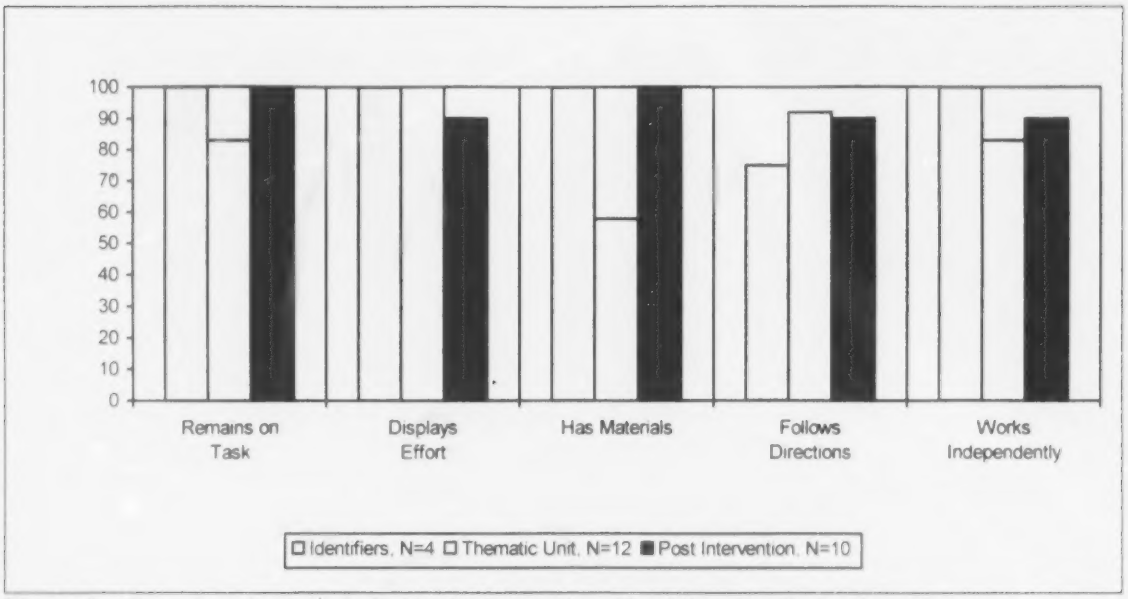


Figure 8. Data Results from Individual Observation Checklist, Site B, Student 1B

Engaged Learning Shown by Percentage of Quality Points

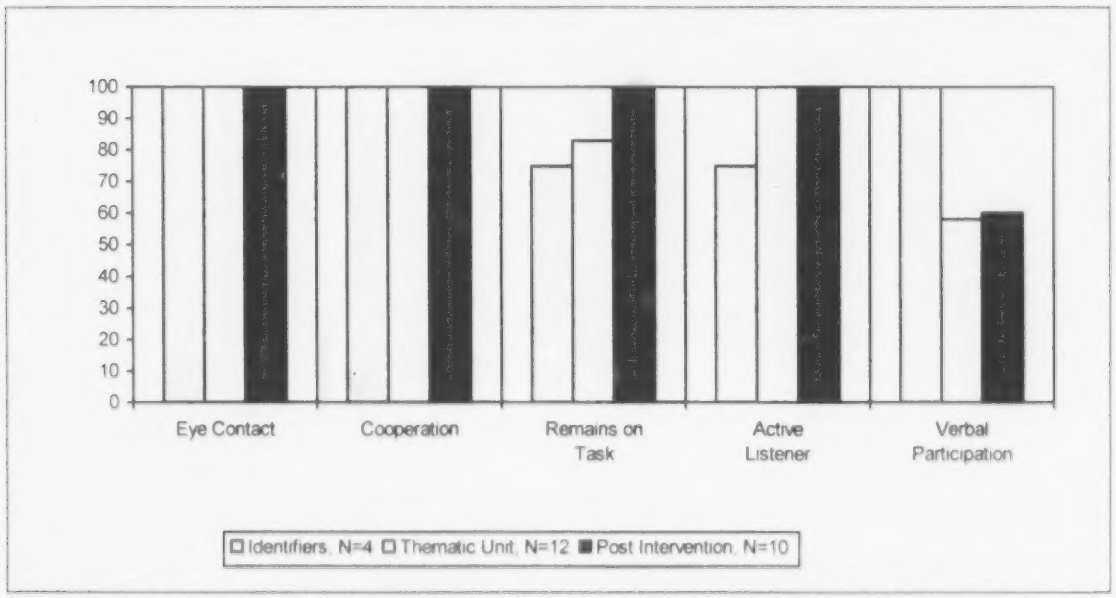


Figure 9. Data Results from Group Observation Checklist, Site B, Student 1B

Engaged Learning Shown by Percentage of Quality Points

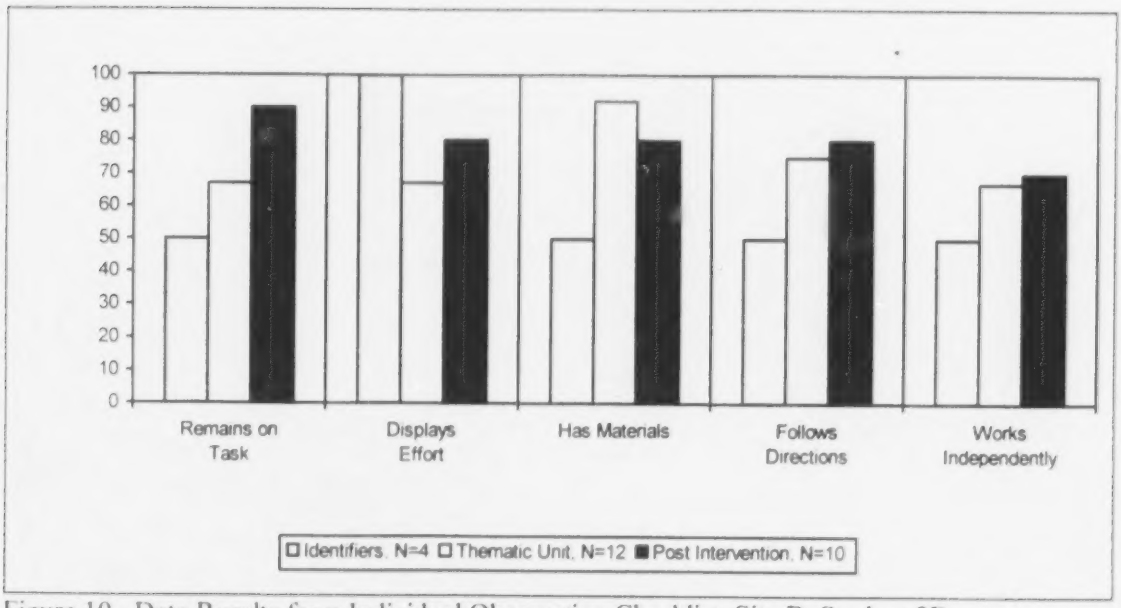


Figure 10. Data Results from Individual Observation Checklist, Site B, Student 2B

Engaged Learning Shown by Percentage of Quality Points

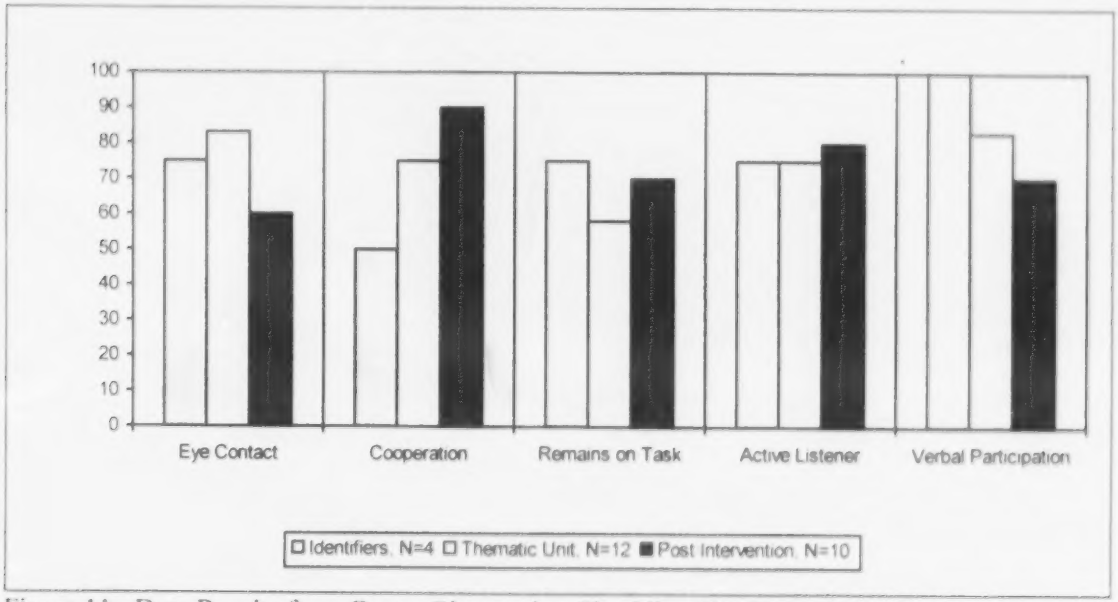


Figure 11. Data Results from Group Observation Checklist, Site B, Student 2B

Engaged Learning Shown by Percentage of Quality Points

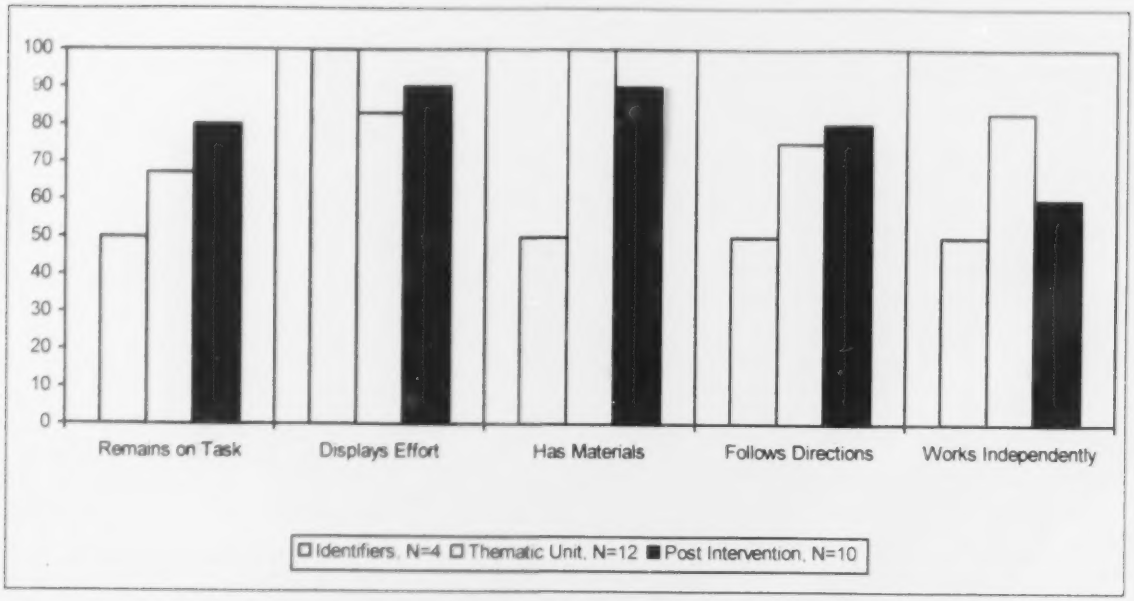


Figure 12. Data Results from Individual Observation Checklist, Site B, Student 3B

Engaged Learning Shown by Percentage of Quality Points

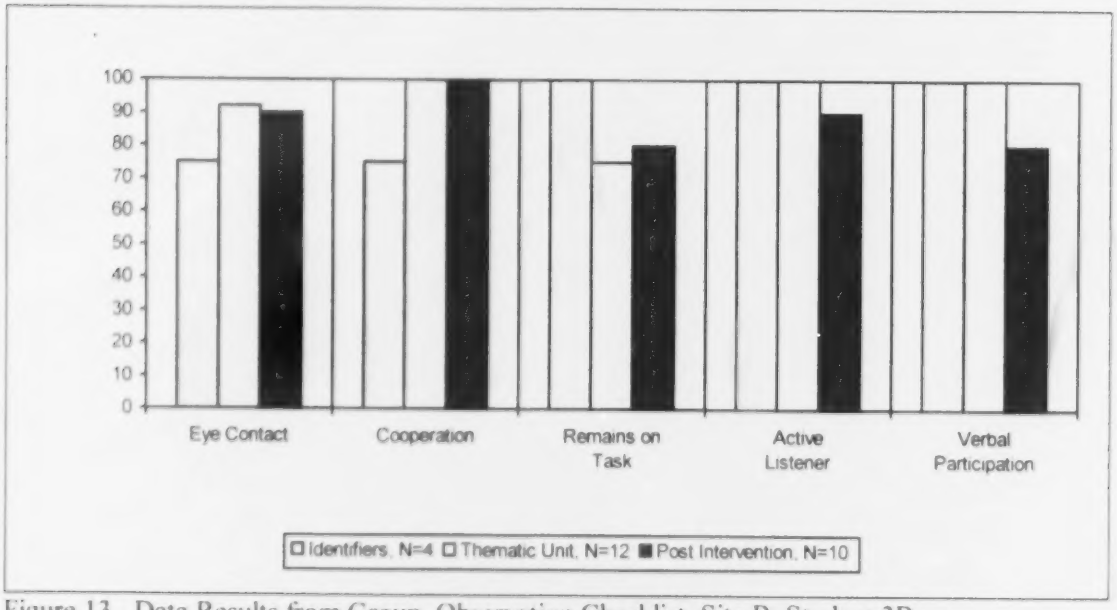


Figure 13. Data Results from Group Observation Checklist, Site B, Student 3B

Engaged Learning Shown by Percentage of Quality Points

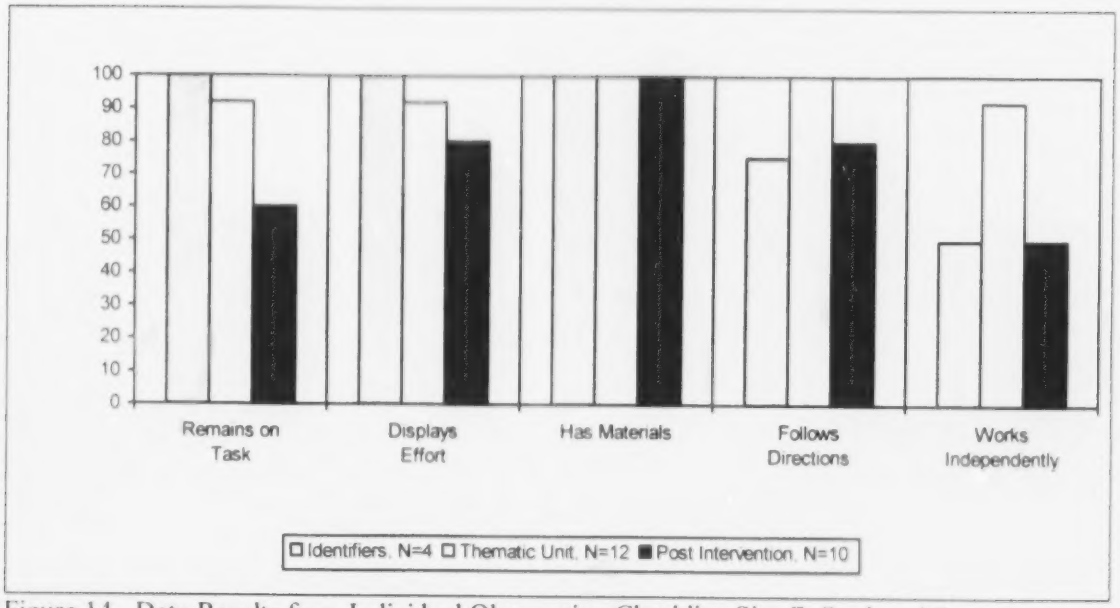


Figure 14. Data Results from Individual Observation Checklist. Site C. Student 1C

Engaged Learning Shown by Percentage of Quality Points

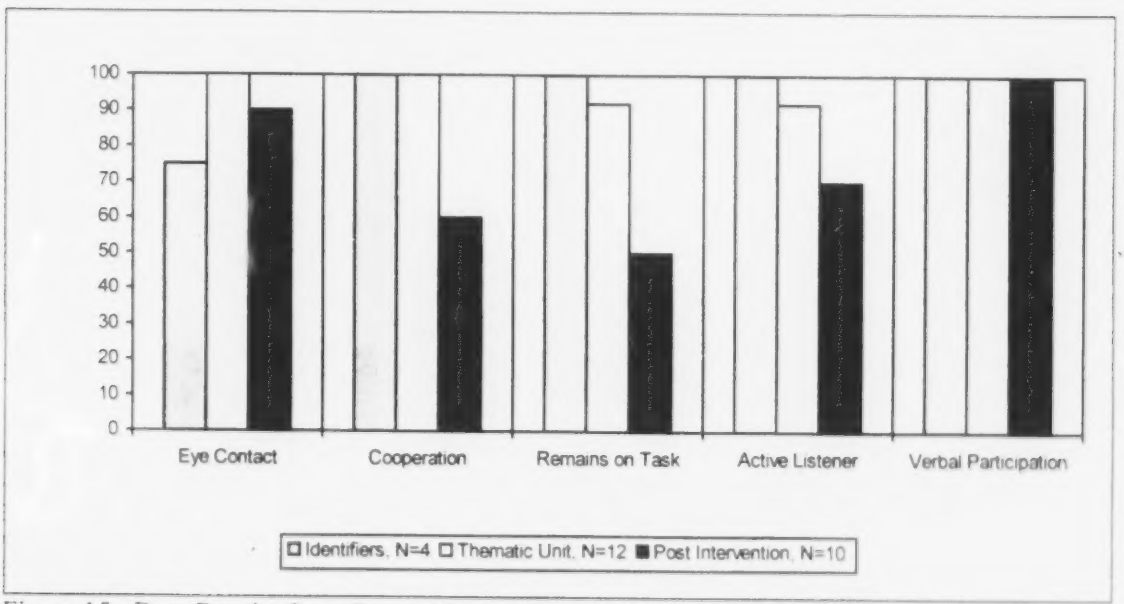


Figure 15. Data Results from Group Observation Checklist. Site C. Student 1C

Engaged Learning Shown by Percentage of Quality Points

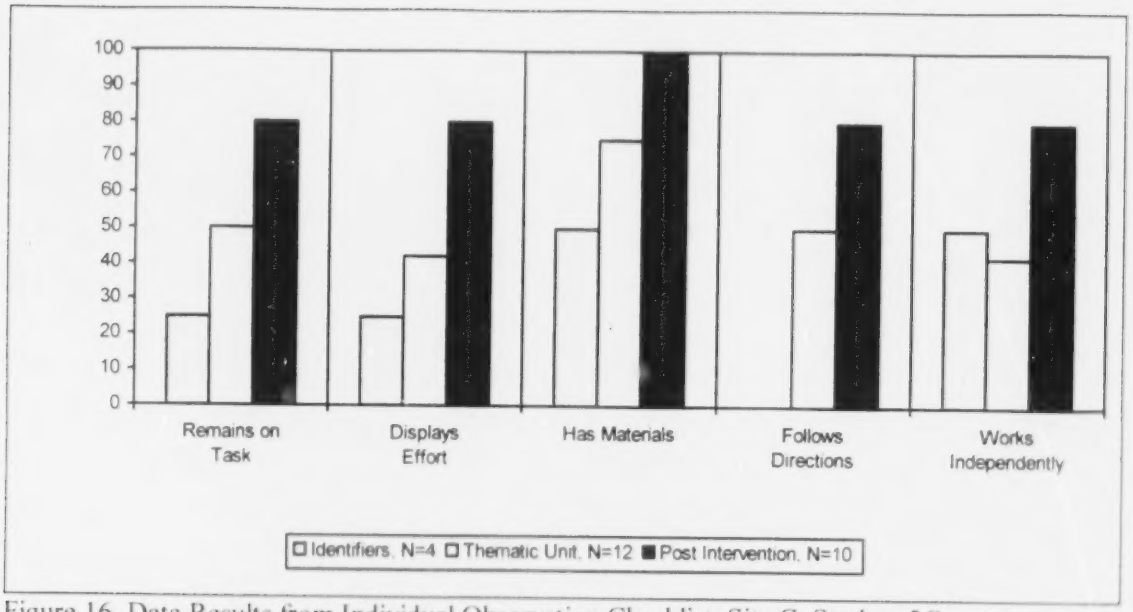


Figure 16. Data Results from Individual Observation Checklist, Site C, Student 2C

Engaged Learning Shown by Percentage of Quality Points

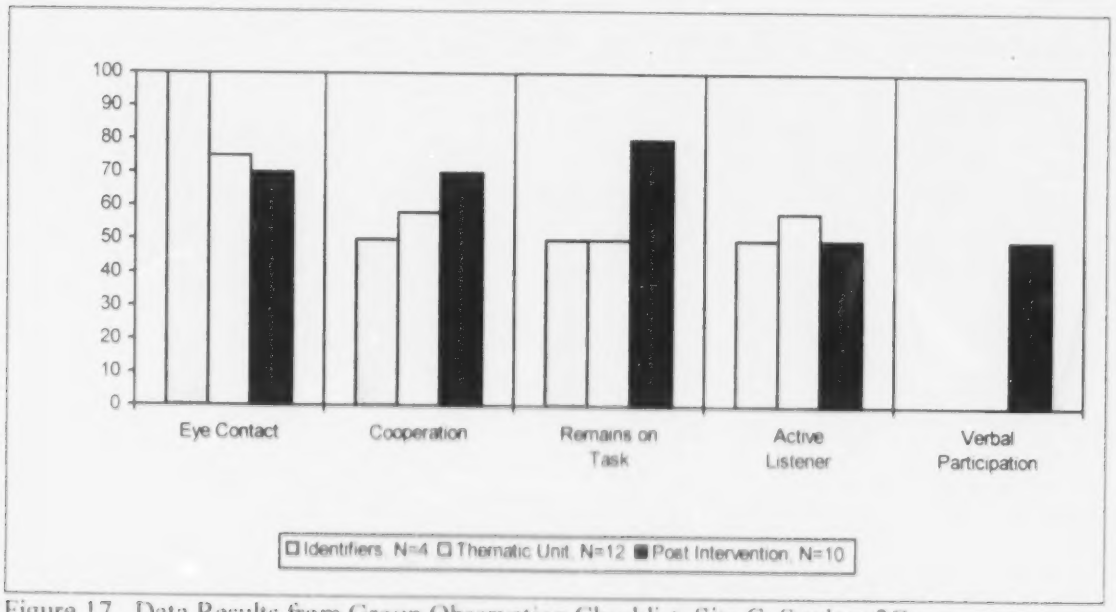


Figure 17. Data Results from Group Observation Checklist, Site C, Student 2C

Engaged Learning Shown by Percentage of Quality Points

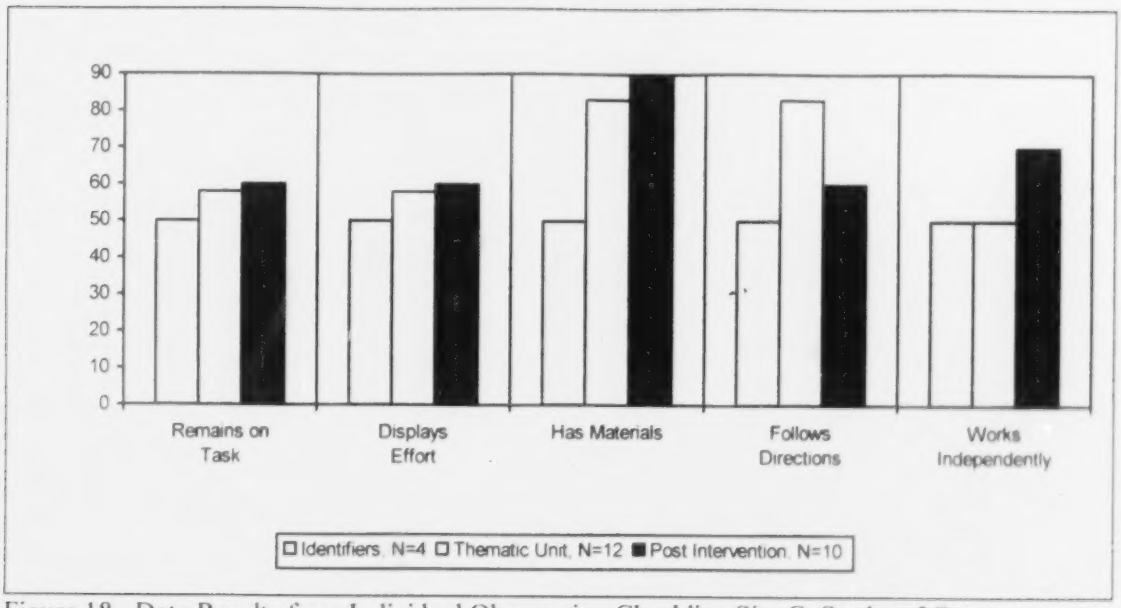


Figure 18. Data Results from Individual Observation Checklist, Site C, Student 3C

Engaged Learning Shown by Percentage of Quality Points

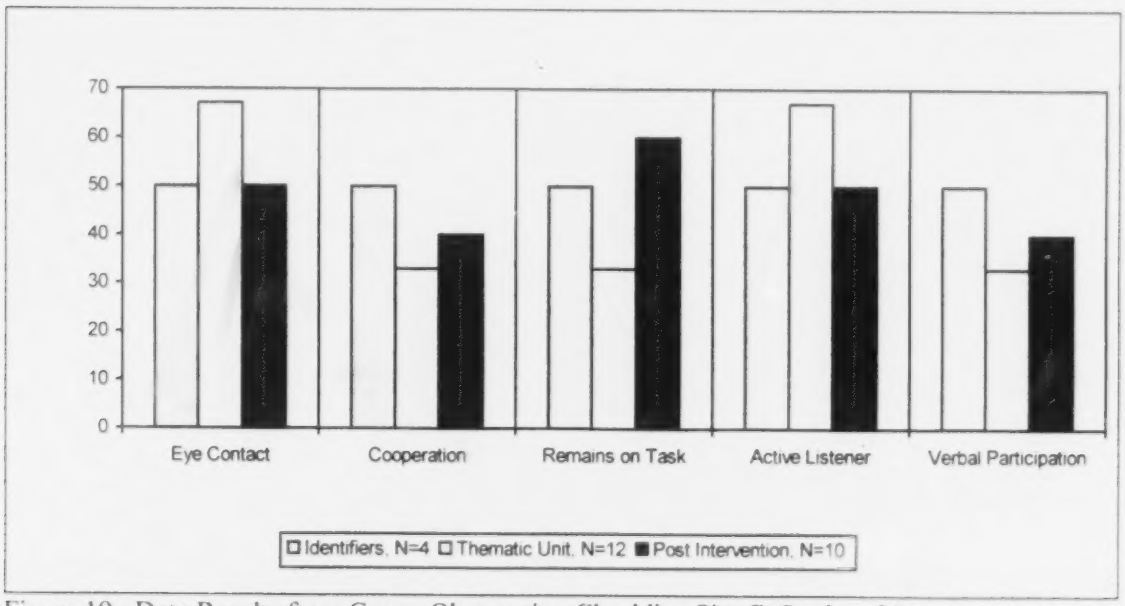


Figure 19. Data Results from Group Observation Checklist, Site C, Student 3C

Engaged Learning Shown by Percentage of Quality Points

Site A

The class at Site A included numerous students who have behavioral problems. Approximately half of the class is causing some sort of disturbance during the school day. The class includes students who have been documented as being clinically depressed, physically and verbally abusive, ADHD, and those who are the victims of parental neglect. Among the same set of children are several who are considered slow learners and noticeably below grade level in mathematics and reading. The researcher recognizes the struggles of the other students from the same class who come to school to learn. The combination of these issues influenced the engagement of the entire class. It was difficult for those being observed by the researcher to demonstrate the 10 identifiers in their learning due to their own off-task behaviors as well as the behavior of the rest of the group.

The researcher at Site A chose students with varying degrees of academic ability. Student 1A was found to be working at or above grade level in the academic areas, but was quite a challenge socially. Student 2A struggled academically, but had tremendous parental support. The parents have requested a weekly progress report with comments regarding what they can help their child with at home. This student behaved appropriately during the school day. The third student, 3A, is working below grade level in all the academic areas and is a behavioral problem for the researcher. This child received little attention at home unless it involved going shopping or gambling. Another behavior that kept the student from being engaged was her own bullying of peers by threatening them physically.

The two students that were observed to be below grade level at the beginning of the year at Site A have made tremendous gains. They are still below grade level, but are working harder to complete their work. These students have shown a desire to improve by showing an increase in the quality of their engagement in the learning process. The student who was functioning at or above grade level has continued to show gains. This student has been spending an increased amount of time on written work that is seen through detailed and organized responses. The figures representing the observation checklists do not show student 1A making progress in

engaged learning. The post intervention data does not accurately represent the student because of a suspensions due to insubordinate behavior. More current observations by the researcher indicated increased engagement in the learning process.

Site B

The Site B researcher chose to observe three students based on observable lack of student engagement. The researcher requested evaluation of all three students by the Multi-Disciplinary Consultation (MDC) team because of concerns regarding academic and behavioral difficulties. Student 1B had difficulty in reading and writing at the beginning of the year, appeared off-task and did not volunteer information in group discussion. The MDC team determined that the student was functioning one and a half years below the expected performance level, but possessed superior intelligence. The team recommended a supplemental reading program to be administered by the learning disabilities teacher. Student 2B had great difficulty staying on task, being organized, showing self-control, and struggled in academic areas. The school MDC team observed the student in the fall of the school year and recommended at that time that a daily journal between home and school be used to document assignments and behavior. The MDC team is currently reevaluating this student. This student's mother has remained very involved, regrettably the student's father has little involvement at home or school. Similarities in off-task behavior and academic concerns are evident in student 3B. Parents noted inattentiveness to given tasks at home. The MDC team is currently evaluating this student.

Site C

Individual and group observation checklist data of student 1C at Site C, mirrored behavior exhibited as a result of tremendous changes in home life. At the beginning of instruction of the thematic unit, student 1C's mother returned after an extended period of institutionalization. The student exhibited classroom behaviors of blaming others, choosing to work alone, not completing activities, and soiling clothing. The identifiers of *remaining on task*, *displays effort*, *demonstrating cooperation*, and *active listening* decreased significantly through the post intervention phase of research.

Student 2C gained confidence in individual and group work. The self-assurance of this student was evidenced in the areas of *remaining on task*, *displays effort*, *participates verbally*, and *works independently*. The level of engagement increased significantly as the student became more comfortable with attending school all day. This kindergartner has made a wonderful adjustment to school.

The researcher at Site C was pleased to note the increases student 3C made during implementation of the action research. During instruction of the thematic integrated unit, this student experienced emotional problems due to the father's incarceration. Within this period, the student was more engaged when working individually and was less cooperative during group activities. Despite family turmoil the student maintained a positive attitude towards school.

While the nine targeted students were subject to most of the analysis, the entire class at each site benefited from the intervention. The researchers noted side effects that increased student engagement for the whole class at all three sites. Some examples of increased engagement were generating more responses to problem-solving questions, enthusiasm for student assignment choices, and enjoyment of sharing their finished products.

Conclusions and Recommendations

Based on the presentation and analysis of the data on improving student engagement in the learning process, students exhibited a marked improvement in remaining on task and following directions. The teaching and practicing of the 10 identifiers of engaged learning appeared to have made students more aware of their responsibilities as learners and members of a group. These improvements were observed by the researchers in the nine targeted students as well as the whole class.

The skills gained from the problem-solving model gave students strategies to use in their approach to new information and learning situations. The model was displayed and referred to during the instruction of the thematic unit by researchers and students. Integration of the problem solving strategies were observed by the researchers outside of the thematic unit.

Researchers noted that students demonstrated greater enthusiasm when given choices for student assignments. Students appeared more engaged and devoted longer periods of time when completing assignment choices. Students' desire and responsibility to complete tasks became more visible to the researchers. The researcher at Site A noted students bringing peers into the classroom to share their completed work. The Site B researcher found students requesting student assignment choices in various academic areas. Site C researcher found that making choices was beneficial in meeting individual instructional levels. All students enjoyed having the power to make choices and appeared to put forth more effort into their assignment of choice.

At all three sites researchers found student assignment choices to be most effective with those students who displayed behavioral problems. The observation was made that these students with behavioral problems displayed a sense of power when given choices. They appreciated their right to exert their independence.

All students benefited from being taught the 10 identifiers of engaged learning at the beginning of the school year. They had a clearer perception of what was expected of them in relation to their learning. It was helpful to have lessons that could be referred to when correcting a student who was not participating in a way that promoted engaged learning. In many cases and inappropriate response on the part of the student was avoided by referring to a lesson on one of the 10 identifiers rather than criticizing a behavior.

Promoting self-regulation and motivation techniques of students should be the goal of professionals in the field of education. Through the teaching of the identifiers of engaged learning, students can be empowered to take control of their own learning. The strategies used in this intervention can be beneficial in encouraging personal responsibility of their learning. The researchers recommend modifying some components of the action research plan. Additional time needs to be allocated for the effective teaching of this plan and to accommodate student desires for higher quality task completion. Analysis of the data from the individual and group checklists could be more valuable if the identifiers for both checklists were identical.

Upon completion of this action research project, the researchers are committed to providing an environment that is conducive to student engagement. Teaching the identifiers of engaged learning, providing assignment choices, and modeling problem-solving strategies empowers the students and teachers to become life long, self-regulated learners.

References

Adams, N., Cooper, G., Johnson, L., Wojtysiak, K. (1996). Improving student engagement in learning activities [On-line]. (ERIC Document Reproduction Service No. ED 400076). Abstract from: ERIC Clearinghouse NO PS024590

Bacon, C. (1993). Student responsibility for learning. Adolescence (20), 199-122.

Bahr, C., Gardner, J., & Okolo, C. (1995). Increasing achievement motivation of elementary school students with mild disabilities. Intervention in school & clinic (30), 279- 298.

Barell, J. (1992). "Like an incredibly hard algebra problem": teaching for metacognition. In A. Costa, J. Bellanca & R. Fogarty (Eds.). (1992). If minds matter a forward to the future volume I: Rationale for change. (pp. 257-266). Palatine, IL: IRI/Skylight Publishing, Inc.

Berliner, D., & Casanova, U.(Eds.) (1996). Putting research to work in your school. Arlington Heights, IL : IRI/Skylight Training and Publishing, Inc.

Blackmore, J. (1996). Learning styles: Introduction [On-line]. Abstract from: Site URL: http://www.cyg.net/~jblackmo/diglib/

Brooks, J. & Brooks, M. (1993). In search of understanding: The case for constructivist classrooms. Alexandria, VA: Association for Supervision and Curriculum Development.

Brophy, J. (1983). Fostering student learning and motivation in the elementary school classroom. In S. Paris, G. Olson & H. Stevenson (Eds.). Learning and motivation in the classroom (pp. 283-285) New Jersey: Lawrence Erlbaum Associates, Inc.

Brophy, J. & Lee, O. (1996). Motivational patterns observed in sixth-grade science classrooms. Journal of research in science teaching (33), 303-318.

Burke, D. (1995). Connecting content and motivation: Education's missing link.Peabody Journal of Education (70), 66-81.

Burke, K.(1994). The mindful school: How to assess authentic learning . Arlington Heights, IL: IRI/Skylight Trainging and Publishing, Inc.

Carpenter, T., Chiang, C., Fenneman, E., Loef, M., & Peterson, P. (1996). How children think about mathematics. In D. Berliner & U. Casanova (Eds.). Putting research to work in your school (pp.120-125). Arlington Heights, IL : IRI/Skylight Training and Publishing, Inc.

Chance, P. (1993). The hidden treasures of extrinsic rewards. Education Digest (58), 42-47.

Costa, A. (1992). The learning community. In A. Costa, J. Bellanca & R. Fogarty (Eds.). (1992). If minds matter a forward to the future volume I: Rationale for change. (pp. 93-101). Palatine, IL: IRI/Skylight Publishing, Inc.

Covington, M. (1983). Motivated cognitions. In S. Paris, G. Olson & H. Stevenson (Eds.). Learning and motivation in the classroom (pp. 139-164). New Jersey: Lawrence Erlbaum Associates, Inc.

Curwin, R.L. & Mendler, A.N. (1988). Discipline with dignity. Virginia: Association for Supervision and Curriculum Development.

DeMeo, M. (1995). Right conditions for learning rarely converge in classrooms. Brown university child & adolescent letter (11), 1-3.

Fountain, G., & Fusco, E. (1992). Reflective teacher, reflective learner. In A. Costa, J. Bellanca & R. Fogarty (Eds.). (1992). If minds matter a forward to the future volume I: Rationale for change. (pp. 239-255). Palatine, IL: IRI/Skylight Publishing, Inc.

Fulk, B., & Montgomery-Grymes, D. (1994). Strategies to improve student motivation. Intervention in School & Clinic (30), 28-39.

Get to know your schools. (1997, March 30). The Rockford Register Star, pp.8-13.

Hootstein, E. (1996). Motivating at-risk students to learn. [On-line]. The Clearing House. (70), 97-101.

Jones, B., Valdez, G., Norakowski, J., & Rasmussen, C. (1994). Meaningful, engaged learning [On-line]. Designing learning and technology for educational reform. Abstract from: Contact info@ncrel.org

Kallick, B. (1989). Evaluation: A collaborative process. In A. Costa, J. Bellanca & R. Fogarty (Eds.). (1992). If minds matter a forward to the future volume II: Designs for change. (pp. 313-319). Palatine, IL: IRI/Skylight Publishing, Inc.

Krupp, J. (1992). Self-esteem and the willingness to change. In A. Costa, J. Bellanca & R. Fogarty (Eds.). (1992). If minds matter a forward to the future volume I: Rationale for change. (pp. 163-172). Palatine, IL: IRI/Skylight Publishing, Inc.

Mercer, C.(1996). Empowering teachers and students with instruction choices in inclusive settings. Remedial & Special Education (17), 226-244.

Nicholls, J. (1983). Conceoptions of ability and achievement motivation: A theory and its implications for education.In S. Paris, G. Olson & H. Stevenson (Eds.). Learning and motivation in the classroom (pp. 211-237) New Jersey: Lawrence Erlbaum Associates, Inc.

Perrone, V. (1994). How to engage students in learning [On-line]. Educational Leadership,51, 11-13. Abstract from: ERIC Clearinghouse NO: EJ477517

Rogers, L. & Share, E. (1997). Get real! Project-based learning. Learning (25), 61-65.

Scheer, J. (1997). "When are we ever going to use this?" Learning (25), 24.

Schlosser, L. (1992). Teacher distance and student disengagement: School lives on the margin. Journal of Teacher Education, (43), 128-145.

Senecal, C., Koestner, R., Vallerand, R. (1995). Self-regulation and academic procastination. The Journal of Social Psychology, (135), 607-620.

Schultz, G. & Switzky, H. (1990). The development of intrinsic motivation in students with learning problems. Preventing school failure (34), 14-26.

Stevenson, H.W., Lee, S-Y., & Stigler, J.W. (1985). Are we expecting enough effort from Students? In D. Berliner & U. Casanova (Eds.). Putting research to work in your school (pp.165-168). Arlington Heights, IL : IRI/Skylight Training and Publishing, Inc.

Wilt, J. (1996). Beyond stickers & popcorn parties. Dimensions of early childhood (24), 17-20.

Appendices

Appendix A
Student Survey

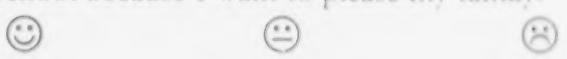
1. I enjoy coming to school to learn.

2. I feel it is my job to learn all that I can.

3. I get excited when I learn something new.

4. Learning makes me feel good about myself.

5. I do my best in school because I want to please my family.

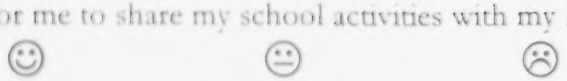


6. I follow directions.

7. I use my work time wisely.

8. I do my best in school because it pleases me.

9. It is important for me to share my school activities with my family.



Appendix A (cont.)

Student Survey
Page 2

10. It is important to me to complete my school work on time.

Yes Maybe No

11. I ask questions about things I want to know.

Yes Maybe No

12. I do my tasks in school without reminders.

Yes Maybe No

13. I do my chores at home without reminders.

Yes Maybe No

Appendix B
Individual Observation Checklist

Observation Checklist - 1
Individual

Site: _____

Rating:
+ = Frequent
/ = Somewhat
O = Not Yet

Observation Date	Student Name	Remains on Task	Displays Effort	Has Necessary or Materials	Follows Directions	Works Independently
	1.					
	2.					
	3.					
	1.					
	2.					
	3.					
	1.					
	2.					
	3.					
	1.					
	2.					
	3.					
	1.					
	2.					
	3.					
	1.					
	2.					
	3.					
	1.					
	2.					
	3.					

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Appendix C
Group Observation Checklist

Observation Checklist - 2
Group

Site: _____

Rating:
+ = Frequent
/ = Somewhat
O = Not Yet

Observation Date	Student Name	Eye Contact on Speaker	Demonstrates Cooperation	Remains on Desired Task	Is an Active Listener	Participates Verbally
	1.					
	2.					
	3.					
	1.					
	2.					
	3.					
	1.					
	2.					
	3.					
	1.					
	2.					
	3.					
	1.					
	2.					
	3.					
	1.					
	2.					
	3.					
	1.					
	2.					
	3.					

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Appendix D
Mini-lessons

Indicators of Engaged Learning
Active Listening

Strategy: Business Cards*

Business cards are motivational rehearsal tools for the purpose of greeting other people or telling about oneself.

Directions: Teacher models the following instructions.

1. Write your first name in the middle of the index card.*
2. In the top left hand corner, write or draw your favorite pizza topping.
3. In the top right hand corner, write or draw the number of siblings you have in your family.
4. In the bottom left hand corner, write or draw your favorite pet.
5. In the bottom right hand corner, write or draw your favorite TV show.

*Students may choose paper doll cut outs as their media for writing responses in place of index cards, i.e. name in center, arms, and legs.

After completing the cards, students will use their cards to introduce themselves to their partner. They need to use good, active listening skills and be ready to introduce their partner to the class using their partner's business card.

The purpose is for students to practice good, active listening.

Reflection:

1. What did you learn about your partner?
2. What type of listener were you?

This strategy could transfer to Family Reading Night where students would prepare cards in advance and introduce their parents or family members.

Indicator of Engaged Learning

Active Listening

Looks like	Sounds like
Heads together	One voice at a time
Eyes on the speaker	No extra sounds
One mouth moving at a time	Asking questions
Nodding	Quiet voices
Taking turns	No interruptions
Waiting	

YOU CAN DO IT

1. HOW WILL YOU KNOW WHEN YOU ARE DONE?

2. WHAT ELSE CAN YOU DO?

3. HOW ELSE CAN YOU SOLVE THE PROBLEM?

4. YOU CAN DO IT WITH JUST A LITTLE MORE EFFORT.

5. ARE YOU SATISFIED WITH IT?

6. WHAT ELSE CAN YOU DO TO MAKE IT BETTER?

7. WOULD YOU CHANGE IT IN ANY WAY?

Appendix D (cont.)

Lesson Example 1: Mac-A-Lena

TARGETED INTELLIGENCE: Musical/Rhythmic

SUPPORTING INTELLIGENCES: Verbal/Linguistic, Visual/Spatial, Intrapersonal, Logical/ Mathematical, Interpersonal

THINKING SKILLS: Following Directions, Sequencing

SOCIAL SKILLS: Communication, Listening, Accepting Self and Others

CONTENT FOCUS: Parts of the body

MATERIALS: Large piece of newsprint, one dark marker

TASK FOCUS: This is a shared drawing. The partners will take turns drawing their part as each verse of the song is sung. They must accept the drawing of the partner and not correct, adjust, or fix it in any way. At the end they will have completed the picture of Mac-A-Lena.

PRODUCT: A picture of Mac-A-Lena

PROBLEM: To draw a picture from a song

ACTIVITY:

1. Divide students into pairs. Name one Student A and the other Student B.
2. Student A gets a large piece of newsprint and B gets a dark marker.
3. Give these directions:
   a. Place the paper lengthwise between the partners.
   b. When a verse is sung, A draws the body part in the song.
   c. All students join in the chorus.
   d. Give the marker to B to draw during the next verse.
4. Make the students aware of the rules.
   a. No body part is to be drawn unless it is sung about.
   b. Swap the marker each time.
   c. When the drawing is complete, put Mac-A-Lena in the habitat or setting of the current unit of study.
   d. Both partners must sign the shared drawing.

REFLECTIONS:

1. What was it like to share the drawing of a picture?
2. Is it easy for you to draw from a song? Why or why not?

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Appendix D (cont.)

Lesson Example 1: Mac-A-Lena

TARGETED INTELLIGENCE: Musical/Rhythmic

SUPPORTING INTELLIGENCES: Verbal/Linguistic, Visual/Spatial, Intrapersonal, Logical/Mathematical, Interpersonal

THINKING SKILLS: Following Directions, Sequencing

SOCIAL SKILLS: Communication, Listening, Accepting Self and Others

CONTENT FOCUS: Parts of the body

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TASK FOCUS: This is a shared drawing. The partners will take turns drawing their part as each verse of the song is sung. They must accept the drawing of the partner and not correct, adjust, or fix it in any way. At the end they will have completed the picture of Mac-A-Lena.

PRODUCT: A picture of Mac-A-Lena

PROBLEM: To draw a picture from a song

ACTIVITY:

1. Divide students into pairs. Name one Student A and the other Student B.
2. Student A gets a large piece of newsprint and B gets a dark marker.
3. Give these directions:
   a. Place the paper lengthwise between the partners.
   b. When a verse is sung, A draws the body part in the song.
   c. All students join in the chorus.
   d. Give the marker to B to draw during the next verse.
4. Make the students aware of the rules.
   a. No body part is to be drawn unless it is sung about.
   b. Swap the marker each time.
   c. When the drawing is complete, put Mac-A-Lena in the habitat or setting of the current unit of study.
   d. Both partners must sign the shared drawing.

REFLECTIONS:

1. What was it like to share the drawing of a picture?
2. Is it easy for you to draw from a song? Why or why not?

Appendix E
Thematic Integrated Unit
Thematic Integrated Unit - Lesson 1

Content Focus: To introduce the topic of dreams and imagination.

Thinking Skill: Problem solving

Indicators of Engaged Learning: See established classroom checklists.

Materials: K-W-L chart, markers, *Froggy Goes to School* by Jonathan London, paper, pencils, markers, crayons, frog puppets cutouts, paper bags.

Key words: dream, imagination, problem solving model *(see Appendix E, page 59)

Activity:

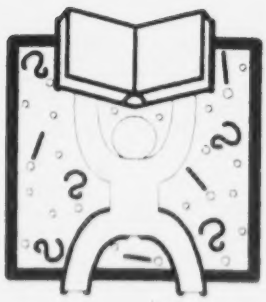
1. Do a K-W-L on dreams.
2. Read the story, *Froggy Goes to School.*
3. Introduce problem solving strategies using the example of the principal meeting Froggy.
4. Discuss Froggy's dream, and the possibilities if his father had not disturbed his dream.

Assessment Choices:

1. Write a different ending to Froggy's dream.
2. Illustrate a different ending to Froggy's dream.
3. Create a skit depicting what Froggy would do if he would have arrived at school in his underwear.
4. Do an oral presentation on "What would you do if you were in Froggy's shoes?"
5. Make frog puppets and dialogue Froggy's problem.

Reflection Choices:

1. Restate the steps of the problem solving model.
2. Would the solutions that the class generated solve Froggy's problem?
3. Have you ever had a dream about the first day of school?



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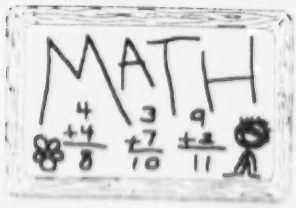


PROBLEM SOLVING MODEL

1. IDENTIFY THE PROBLEM
2. RESTATE THE PROBLEM IN MY OWN WORDS
3. GATHER INFORMATION
4. GENERATE SOLUTIONS
5. CHOOSE AND IMPLEMENT A SOLUTION
6. REFLECTION

Thematic Integrated Unit - Lesson 2

Content Focus: To further explore the topic of dreams and imagination.

Thinking Skill: Problem solving

Indicators of Engaged Learning: See established classroom checklists.

Materials: K-W-L from Lesson 1. *Oh, the Places You'll Go!* by Dr. Suess. *The Anti-Coloring Book*. 'do you see yourself in this crystal ball' process sheets.

Key words: dream, imagination, independence, making choices, encouragement.

Activity:

1. Refer back to K-W- L chart on dreams from Lesson 1.
2. Read the quote from Lewis Carroll's *Alice in Wonderland*.
   "There's no use trying," she said, "one can't believe impossible things."
   "I dare say you haven't had much practice," said the Queen. "When I was your age, I always did it for half-an-hour a day. Why sometimes I've believed as many as six impossible things before breakfast."
3. Read the story, *Oh, the Places You'll Go!*
4. Model the problem solving strategy using the statements:

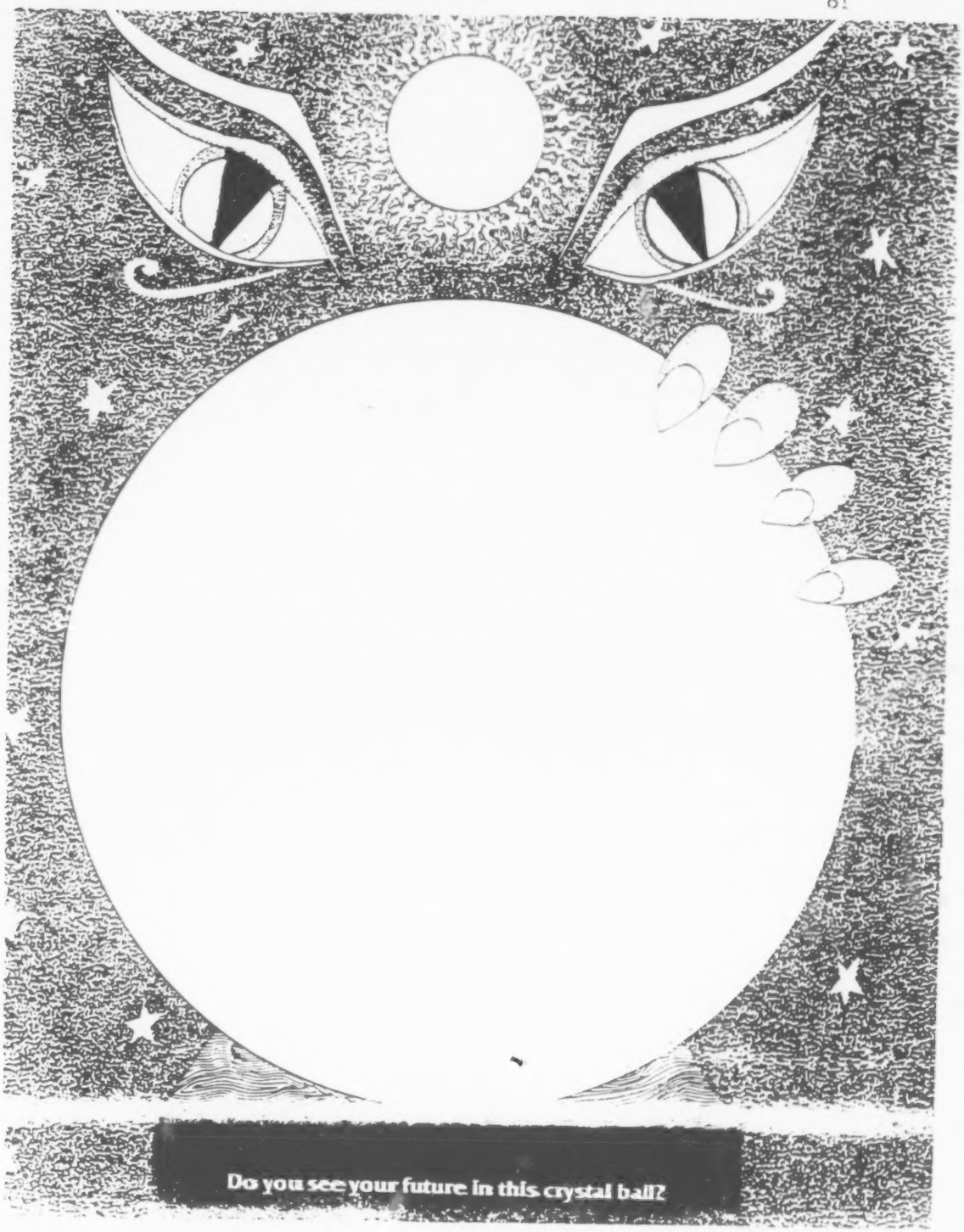
"You'll look up and down streets. Look 'm over with care. About some you will say, I don't choose to go there. With your head full of brains, and your shoes full of feet, you're too smart to go down any not-so-good street. And you might not find any you'll want to go down. In that case, course, you'll head straight out of town. *--Dr. Seuss*

Assessment Choices:

1. Make a collage of the places you can go, i.e. vacation, imaginary trip, in your mind.
2. Make a list of the places you can go, i.e. vacation, imaginary trip, in your mind.
3. Illustrate your future in the year 2010, may use 'do you see your future in this crystal ball'.
4. Bring a photograph and explain where you have been.
5. Write a resume for an imaginary job you would like to hold.
6. Draw a timeline for your life in the future.

Reflection:

1. Have you ever wished to be someone else?
2. Where is your favorite place?



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Thematic Integrated Unit - Lesson 3

Content Focus: To further explore dreams and imagination

Thinking Skill: Problem solving

Indicators of Engaged Learning: See established classroom checklists

Materials: *A Whole New World* from Walt Disney's Aladdin, *When you Wish Upon a Star* from Walt Disney's Pinochio, circle and frame model, *The Anti-Coloring Book*, 'Star Light, Star Bright' process sheet and 'What would you do with 1,000 dollars' process sheet, paper, pencils, paint, colored pencils, crayons

Key words: Wishing, persuade

Activity:

1. Review and add to K-W-L on dreams.
2. Review problem solving model.
3. Play the song or video of A Whole New World.
4. Using the circle and frame model, brainstorm the concept of wishes and ways of obtaining their wish.

Assessment Choices:

1. Design a want ad for your wish.
2. Paint a picture of your wish.
3. Write a persuasive letter to someone to fulfill your wish.
4. Draw a cartoon strip of how your wish was accomplished.
5. Create a book mark representing your wish.
6. Create a travel brochure representing your dream place.

Reflection:

1. Is your wish obtainable?
2. Did you wish for too much? Were you too greedy?
3. Did you ever have a wish come true?

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Thematic Integrated Unit - Lesson 4

Content Focus: To further explore dreams and imagination.

Thinking Skill: Problem solving

Indicators of Engaged Learning: See established classroom checklists.

Materials: A collection of Percy Ross' columns, paper, pencils, markers, crayons, envelopes, magazines, glue, string, hangers, paper towel rolls.

Key words: Philanthropy, charity, giving.

Activity:

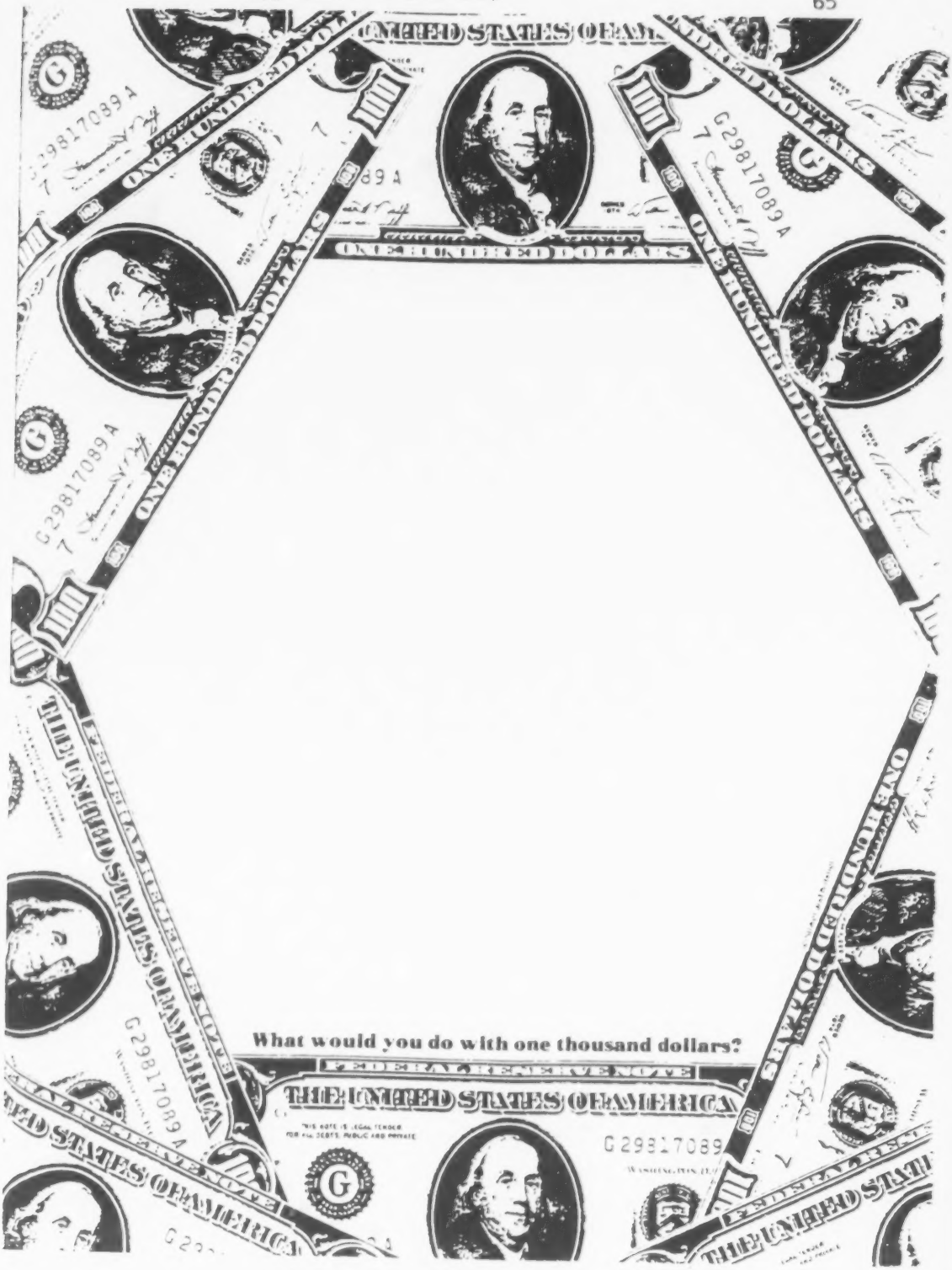
1. Review the K-W-L from previous lesson.
2. Review problem solving model.
3. Explain the concept of giving, granting wishes, fulfilling needs
4. Read and analyze Percy Ross' columns. Apply the problem solving strategies to determine if money should be allocated to particular requests.

Assessment Choices:

1. Write a letter to Percy Ross and ask for him to grant your wish.
2. Role play the part of Percy Ross and give a reply and rationale of letters you receive.
3. Draw a picture of someone you imagine to grant your wishes.
4. Write a story about what your whole new world would look like.
5. Write a rap about Percy Ross and his generosity.
6. Make a mobile of your wishes.

Reflection:

1. Why do you think Percy Ross grants wishes?
2. If you were a millionaire would you grant wishes?



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Thematic Integrated Unit - Lesson 5

Content Focus: To further explore dreams and imagination.

Thinking Skill: Problem solving

Indicators of Engaged Learning: See established classroom checklists.

Materials: *The Giving Tree* by Shel Silverstein, paper, pencils, glue.

Key words: dedication, philanthropist, commemorating, unselfish attitude.

Activity:

1. Review K-W-L of previous lessons.
2. Review problem solving method.
3. Read and discuss *The Giving Tree* by Shel Silverstein. What if the tree had said no? What could the boy give back to the tree? Where else could the boy have gone to get help?

Assessment Choices:

1. Write: a recipe, thank you note, poem, or dedication to your giving tree.
2. Design a stamp commemorating a philanthropist.
3. Interview a classmate about how they were a giving tree to someone.
4. Draw a picture of a gift you would like to give someone.
5. Create a coupon book of what you would do for someone- compile into classroom book.

Reflection:

1. How does giving make you feel?
2. What words would you use to describe the boy in *The Giving Tree*?

Thematic Integrated Unit - Lesson 6

Content Focus: To further explore dreams and imagination.

Thinking Skill: Problem solving

Indicators of Engaged Learning: See established classroom checklists.

Materials: *When I was Little* by Marcia Williams, *Primarily Creativity*, 'Imagination' process sheets, 'The Rainbow' process sheets, tape or video of 'Somewhere Over the Rainbow' from *The Wizard of Oz*, paper, pencils.

Key words: past, present, future, predicting, reflecting, inventions.

Activity:

1. Review K-W-L of previous lessons.
2. Review problem solving method.
3. Read aloud *When I was Little* by Marcia Williams. Discuss what your parents and grandparents have told you about when they grew up--hot lunch, transportation, before school care, entertainment, toys, games, and chores.

Assessment Choices:

1. Draw a timeline of future inventions.
2. Forecast a dialogue between you and your future grandchild about your childhood days in school.
3. Listen to *Somewhere Over the Rainbow* by Judy Garland and draw a picture of what you think the world would look like in an imaginary land.
4. Interview your grandparent or other adult about their life growing up.
5. Make a paper project cube depicting things you will tell your future children bout your life growing up.

Reflection:

1. How will things be better in the future? Or worse?
2. What are some great things you have that your children might not have in the future?

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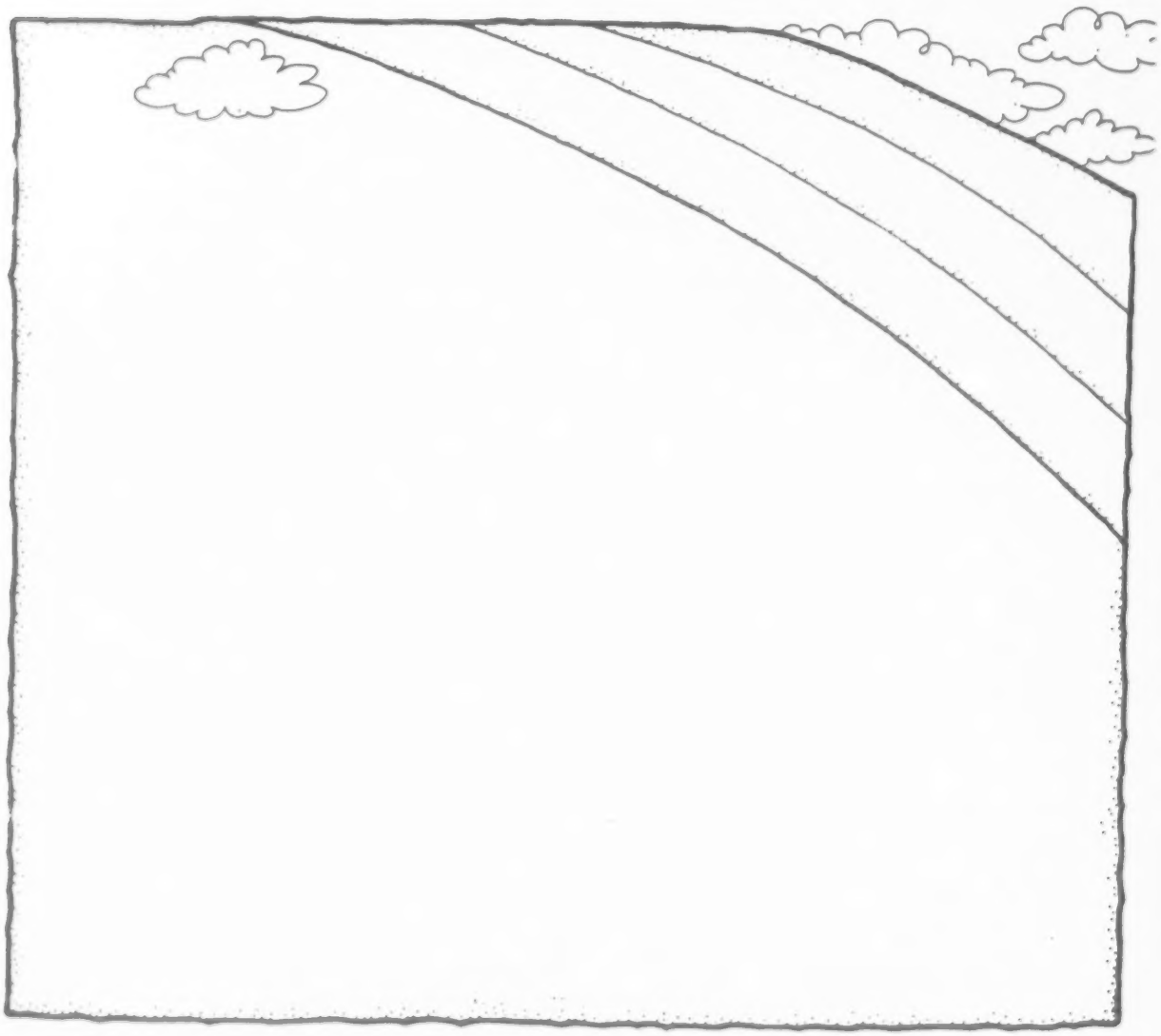
Imagination

Visualizing

The song *Somewhere Over the Rainbow* describes what things are like on the other side of the rainbow. Have you ever thought about a land on the other side of the rainbow?

Close your eyes and imagine what it would be like at the end of the rainbow. Then open your eyes and draw a picture of the imaginary land you saw with your mind's eye.



Extra: Describe what wonderful adventures await children in this land.

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